IS IT TOO LATE TO SAVE THE EVERGLADES?

Smithsonian

MARCH 2006

DESTINATION EUROPE

- Budapest: Hungarian Rhapsody
- Ben Franklin's London Digs
- Restoring the Jewel of Dresden
- 2006 Hot Spots

COWBOY ARCHAEOLOGY

Exploring Utah's Prehistoric Paradise

EDVARD MUNCH

The Tortured Artist Behind *The Scream*

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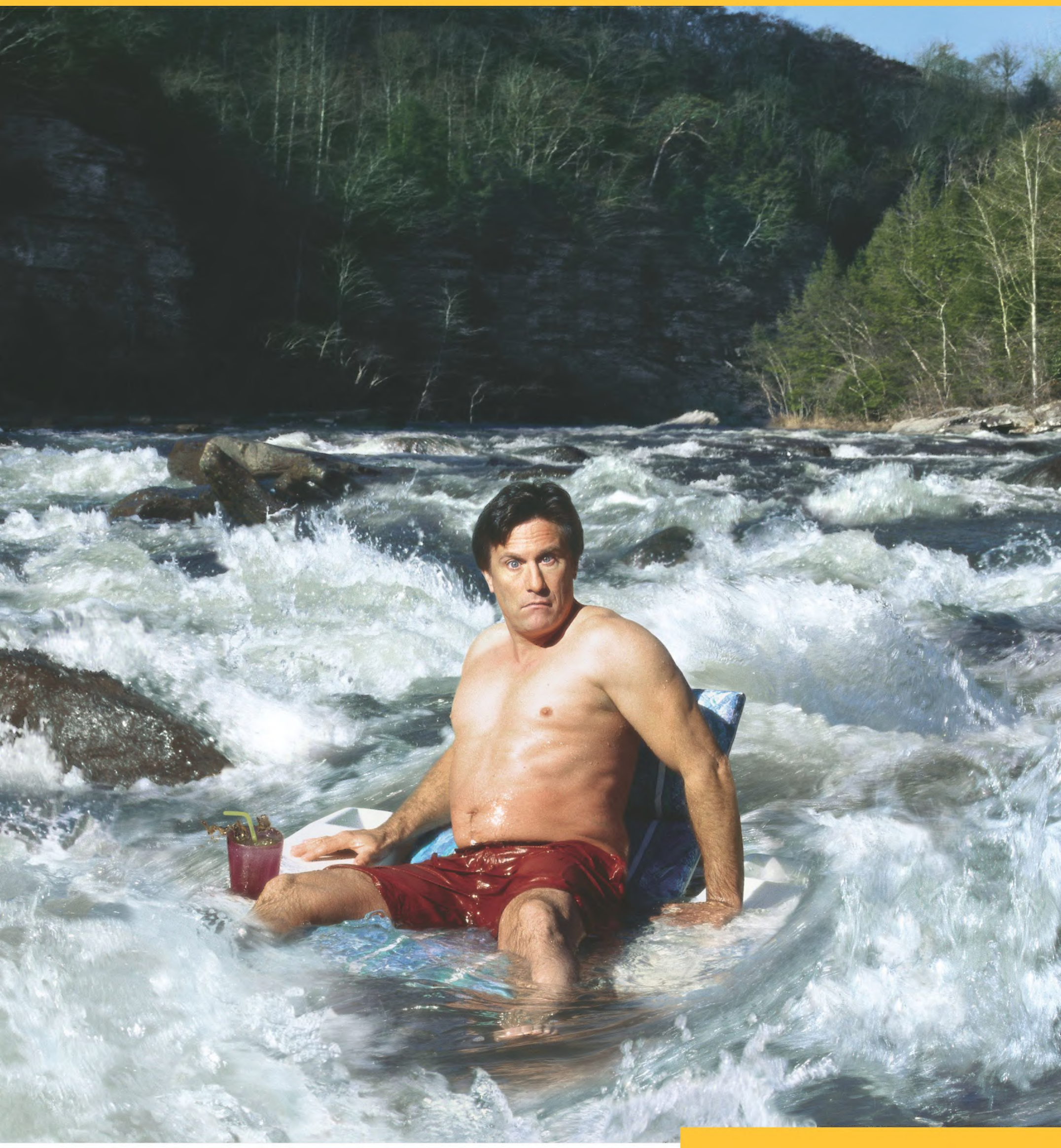

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MARCH 2006 VOLUME 36, NUMBER 12

The Everglades supported an astonishing variety of life. Artist John J. Audubon nearly swooned over the great flocks of wading birds that darkened its skies.

—"EVERGLADES," PAGE 46

FEATURES

46 EVERGLADES
Half of America's great wetland has been drained or paved, and the other half is an ecological mess. Can it be saved by the largest environmental restoration ever attempted?
BY MICHAEL GRUNWALD
PHOTOGRAPHS BY CARLTON WARD JR.

58 EDVARD MUNCH: BEYOND *THE SCREAM*
He's known for one iconic image. But the first major American retrospective in 30 years presents the tortured Norwegian artist as a powerful innovator
BY ARTHUR LUBOW

68 SECRETS OF THE RANGE CREEK RANCH
Archaeologists believe that prehistoric ruins on a well-tended Utah ranch may finally reveal what happened to the once-thriving Fremont people
BY KEITH KLOOR / PHOTOGRAPHS BY DOUGLAS MERRIAM

DESTINATION EUROPE 2006

76 CONTINENTAL CROSSROADS
From art galleries to restaurants, Old World Budapest is thriving again

86 BONE VOYAGE
A photographer and his dog see the sights

92 DRESDEN'S CROWNING GLORY
A landmark cathedral is lovingly rebuilt

97 BEN FRANKLIN SLEPT HERE
His only surviving residence is open—in London

100 HIGHLIGHTS AND HOT SPOTS
A (somewhat biased) selection of this year's noteworthy events

THIS PAGE: The Everglades was once home to some 350 species of birds (an egret in Big Cypress Swamp). Photograph by Carlton Ward Jr.

COVER: Pecorino pawses outside the gates of Castle Schoenbrunn, in Vienna, Austria. Photograph by Toni Anzenberger / Anzenberger Agency. Inset by Carlton Ward Jr.

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An archaeologist was quoted as calling Range Creek a "national treasure" and its discovery akin to "finding a Van Gogh in your grandmother's attic."

—"SECRETS OF THE RANGE CREEK RANCH," PAGE 68

DEPARTMENTS

22 INDELIBLE IMAGES THE POWER OF PRAYER

In Doug Curran's photograph of a Jain ritual in India, a pilgrim reflects centuries of belief **BY MAURA MOYNIHAN**

26 POINTS OF INTEREST THE BEST AND BRIGHTEST

A Las Vegas museum dedicates itself to keeping great old neon signs aglow **BY LAUREN WILCOX**

31 THE OBJECT AT HAND VISIONARY VIRTUOSO

A pair of sunglasses evokes a consummate musician—the late Ray Charles. **BY OWEN EDWARDS**

33 DIGS SPAIN MAKES A STAND

In North Carolina, archaeologists have found the remains of a long-lost, 400-year-old fort—the earliest known European settlement in the United States' interior **BY ANDREW LAWLER**

36 PHENOMENA & CURIOSITIES CITY SLINKERS

Native to the Great Plains, coyotes have recently been moving into urban areas across the United States, for reasons scientists can't entirely explain **BY CHRISTINE DELL'AMORE**

102 PRESENCE OF MIND DANCING IN THE DARK

Thomas Edison, the brilliant inventor with nearly 2,000 patents to his name, and the founder, in 1894, of the world's first movie company, was no Spielberg **BY TIM PAGE**

10 EDITOR'S NOTE HAVE CANINE, WILL TRAVEL

14 FROM THE SECRETARY FIELD TRIP!

16 LETTERS

18 WILD THINGS

39 AROUND THE MALL

44 THIS MONTH IN HISTORY

110 BOOKS *THE WORST HARD TIME*

112 THE LAST PAGE GLOBAL WORDING

THIS PAGE: Bighorn sheep, which appear frequently in Fremont rock art (a petroglyph near the Wilcox Ranch in Range Creek Canyon, Utah), were an important food source for the tribe. Photograph by Douglas Merriam.

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EDITOR'S NOTE

HAVE CANINE, WILL TRAVEL

OUR FUR-FLUNG CORRESPONDENTS IN DOGGED PURSUIT

BY CAREY WINFREY

PHOTOGRAPHS of international supermodels gallivanting around Europe aren't our style. But when the model in question has four paws, floppy ears and an inordinate fondness for spaghetti—well, we couldn't resist. Meet Pecorino, an 8-year-old mutt adopted by Vienna-born travel photographer Toni Anzenberger ("Bone Voyage," p. 86). The duo have produced several books and calendars together, and Pecorino is such a celebrity that in many European cities people stop him on the street. Anzenberger's photographs are remarkable, with the cheerful pup adding what the photographer calls a "vital touch of interest" to otherwise familiar sights.

ANZENBERGER AND FRIEND: REMARKABLE PHOTOGRAPHS WITH A "TOUCH OF INTEREST."

MICHAEL GRUNWALD, a *Washington Post* reporter whose new book about the Everglades (*The Swamp*) we excerpt in this issue (p. 46), has decidedly mixed feelings about South Florida. "It's become such an unnatural place," he says. "They've got levees that are supposed to keep nature out—that separate the cities from the swamp—but last year alone people called alligator control 15,000 times complaining about the reptiles in their backyards. But it's the *alligators*' backyard!" Then too, South Florida is "75 degrees and beautiful, so of course people are going to want to keep coming. And the problems will just get worse."

ARTHUR LUBOW, a New York City-based writer specializing in the arts, says that Edvard Munch would not be pleased that his best-known work, *The Scream*, has found its way to the American shopping mall on T-shirts, blow-up dolls and computer mouse pads. "Munch certainly wouldn't have had very nice things to say about these appropriations," says Lubow, who wrote about the artist (p. 58). Munch, Lubow notes, was an "extremely prolific and restlessly innovative artist" who helped shape modern art. Visiting Munch's native Norway, Lubow was struck by similarities between that nation's "powerfully simple landscape with its curves and ice floes" and the colorful shapes that are Munch's signature. "It really looks like Munch's work," he says.

KEITH KLOOR went to Utah's remote Range Creek Canyon to report on an astonishing archaeological site formerly owned by a rancher named Waldo Wilcox and recently deeded to the state (p. 68). But Wilcox turned out to be as much a part of the story as the centuries-old artifacts of the Fremont people who lived there around A.D. 1000. "He is a bundle of contradictions," says Kloor. "He calls himself an old broken-down cowboy, but he loves being in the spotlight."

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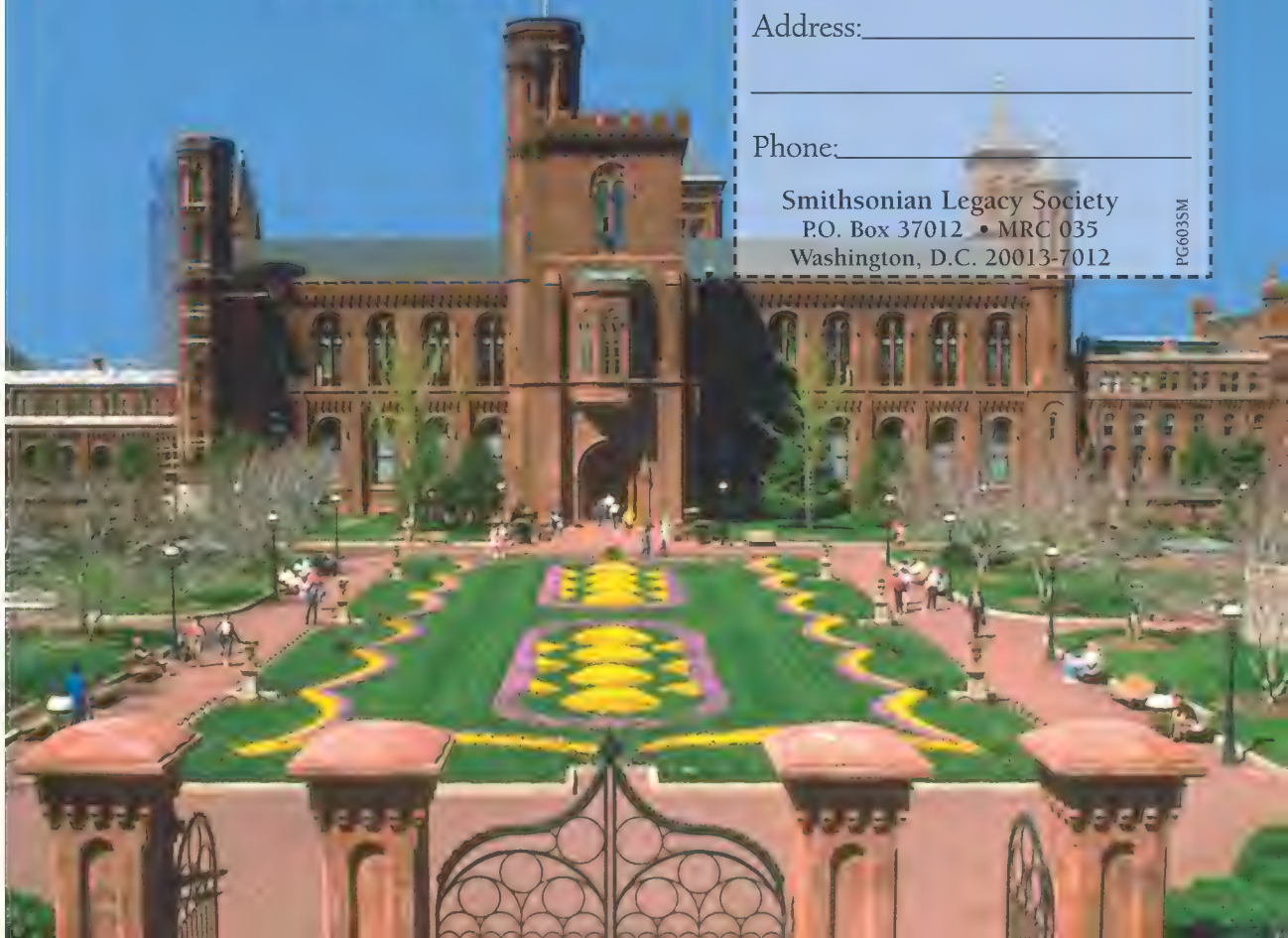

Field Trip!

Education experts help children, their teachers, parents and grandparents get the most out of a museum visit—real or virtual

FEW WORDS from a teacher stir as much excitement as "field trip." Students always love the chance to break away from the books and go sightseeing. Enjoyable exhibitions and promoting the powerful synergy of curiosity, learning and fun are of course a big part of what the Smithsonian is all about. This synergy is indeed the goal of the Smithsonian Center for Education and Museum Studies (SCEMS) as it helps children as well as their teachers, parents and grandparents take meaningful trips—whether real or virtual—to Smithsonian museums and others around the country. With dozens of publications, lesson plans and teachers' guides, kids' activities and links on its highly acclaimed Web site (SmithsonianEducation.org), the center offers resources galore. New this year is another Web site (SmithsonianSource.org) with digitized primary and other sources, such as video clips, for teachers of American history.

And teachers should have their own field trips. Last October, at the Smithsonian National Postal Museum, 2,000 teachers from more than 20 states attended Smithsonian Teachers' Night, organized by SCEMS to introduce them to the educational resources available here. Attendees met representatives from Smithsonian museums and many of the Institution's research divisions, talked to authors of recently published books and collected everything from in-depth lesson plans to handy museum guides. Now in its 14th year, Teachers' Night has become increasingly popular; last year, the free event was filled soon after the center began accepting reservations. Similar events at Smithsonian Affiliate museums and summer workshops are also quickly filled.

Yet Teachers' Night is only one small part of what the center achieves each year. It reaches millions of teachers and parents, and through them tens of millions of children. SCEMS publishes e-newsletters and *Smithsonian in Your Classroom*, a full-color, lavishly illustrated magazine that can be downloaded from SmithsonianEducation.org and is distributed free of charge to every elementary and middle school in the country twice a year. Recent issues focused on the art of portraiture and the tradition of Native American doll-making. One issue was chock-full of ideas to help teachers enliven their history lessons with evocative and well-chosen primary sources, from photographs to period advertisements. This spring's issue shows how to teach poetry with the help of music available through SmithsonianGlobalSound.org.

Recognizing the importance of learning from family members, the center created the *Grandparents' Guide to the Smithsonian*, a practical collection of tips on how to enrich any pan-generational visit. It also conducts research with the educational departments of Smithsonian museums to help them increase the appeal and effectiveness of their activities. But the center reaches far beyond the Institution's literal walls to the more than 100 Smithsonian Affiliate museums; SmithsonianEducation.org informs visitors about "family-friendly exhibits across the nation," such as a show at the National Museum of Dentistry in Baltimore called "32 Terrific Teeth" that invites visitors to play a "Tooth Jukebox."

COLORFUL WEB SITES AND DOZENS OF PUBLICATIONS REACH CHILDREN BY THE TENS OF MILLIONS.

The center's Web site also offers on-line activities—*Idea*Labs, based on Smithsonian collections and research; *Artifact & Analysis*, a publication for Advanced Placement students that teaches American history by interpreting the meaning of objects such as Barbie Dolls; and Smithsonian Kids, a wild and colorful on-line destination where kids can "discover fast, fun, cool, scary, patriotic, and beautiful things at the Smithsonian." If they'd like to tell their friends about their virtual field trip, they can send "e-cards"—"e" for e-mail but also for entertaining *and*, of course, educational.

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LETTERS

Readers respond to the January issue:

COVERING CHÁVEZ

I AM APPALLED by the one-sided view of Hugo Chávez's regime in Katherine Ellison's "Venezuela Steers A New Course." And to get it so wrong! Whatever the problems of the country pre-Chávez, it was thoroughly open and democratic and could not match the levels of poverty and official corruption in today's Venezuela. Ms. Ellison seems to have swallowed whole the Chávez myth of what was wrong and what is needed to make things right. Flush times in the oil market have always provided Venezuelan governments the wherewithal to spread cash around the country, but now, in the flushest times of all, the redistribution of wealth slights the productive sector, diverts record levels of money to corrupt government and military officials, and does nothing to ensure a better future for the poor. Previous regimes demonstrably did better on all three counts. Venezuelans, of course, have the right to choose leaders who pursue policies with no hope of sustainably raising their living standards. But the world is filled with nations that have recognized that superficially attractive populist or socialist notions, supported by leaders who blame the United States, the West and/or the International Monetary Fund for all their failures, ultimately have nothing to offer their people. The lesson is yet to be learned in Venezuela.

MICHAEL SKOL
U.S. AMBASSADOR TO VENEZUELA, 1990-93
CHAMPLAIN, NEW YORK

Author Katherine Ellison responds:
To call my article one-sided overlooks the considerable attention it gives to Venezuela's serious current problems of repression of the press, deteriorating institutions and declining investment in the national oil company. But there's another side to the story. Former ambassador Skol notes that Venezuelans have the right to choose their leaders. In democratic elections, they've overwhelmingly chosen President Hugo Chávez, and my article is an effort to explain why this happened. Part of the reason is the legacy of President Carlos Andrés Pérez, who held power during former ambassador Skol's term and was responsible for lethal military repression against protesters. Pérez was impeached for corruption in 1993.

KATHERINE ELLISON'S article is one of the few fair and balanced pieces I have seen on Hugo Chávez in the U.S. media. By sympathetically profiling both *Chávistas* and anti-*Chávistas*, the author demonstrated that each side has valid reasons for their strongly held views. She also demonstrates that Chávez's political success is partly due to the opposition's lack of a credible program or leader—a lack that was evident in the 1990s before Chávez came to power. We would all be better served if more reporters investigated the current scene in Venezuela with an open mind and in its historical context.

JUDITH EWELL
WILLIAMSBURG, VIRGINIA

HUMANS NOT HIPPOS

AS A RESULT of the ruthlessness of Robert Mugabe, one of the world's worst dictators, nearly a million people in Zimbabwe have been rendered homeless, their homes bulldozed right in front of them—and "Hippo Haven" is worried about hippos? I do not wish to see animals mistreated or maliciously harmed, but neither should their needs be made paramount to the needs or rights of human beings. Zimbabwe is being destroyed by greed and severe mishandling of government affairs. Let's save our sympathies for matters far more worthy than a bunch of hippos.

BROOK FORD
RALEIGH, NORTH CAROLINA

CONSERVATIONISTS Karen and Jean-Roger Paolillo are a rare couple. I pray that no harm comes to them as they try to save the hippos. They are doing remarkable work.

TOM LOUDERBACK
JACKSONVILLE, FLORIDA

PRESIDENTIAL PREROGATIVE

"MY WHOLE SOUL IS IN IT," about Lincoln's Emancipation Proclamation, was fascinating and timely in light of Bush's "eavesdropping" authorization to the National Security Agency. Should Lincoln's use of constitutional war powers be less controversial than Bush's argument for similar war powers just because Lincoln's ends were more unambiguously moral than Bush's?

LEON PERKOWSKI
PRATTVILLE, ALABAMA

GUESS WHO CAME TO DINNER

"CÉZANNE" MAKES a common mistake by attributing the description of Paul Cézanne's crude table manners to a letter by Mary Cassatt. In fact, the letter's author is American artist Matilda Lewis.

JANINE VOLKMAR
TRINIDAD, CALIFORNIA

We regret the error. —Ed.

Please send letters to LettersEd@si.edu or to **Letters, Smithsonian, MRC 951, P.O. Box 37012, Washington, D.C. 20013.** Include a telephone number and address. Letters may be edited for clarity or space. Because of the high volume of mail we receive, we cannot respond to all letters. Send queries about the Smithsonian Institution to info@si.edu or to VIARC, Public Inquiry Mail Service, P.O. Box 37012, Washington, D.C. 20013.

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Wild Things

- LIFE AS WE KNOW IT -

WHAT'S UP? Worldwide, 2005 was the warmest year in a century • At least 128 types of bacteria live in the human stomach

CALLING ALL WASPS

Corn has a perhaps unexpected capacity: retaliation. When a caterpillar chomps on a cornstalk, the plant releases a chemical SOS that summons tiny parasitic wasps no longer than an eyelash. The wasps land on the caterpillar and lay eggs. Within two days, the eggs hatch, and larval wasps crawl into the caterpillar—and eat it. Researchers at the Max Planck Institute in Jena, Germany, have now identified the gene in corn that concocts the plant's distress signal. After the researchers transplanted the gene into *another* plant, it sent for a squadron of wasps. The work underscores the elaborate means that plants have evolved to defend themselves, and might be used to help protect crops without pesticides.

BAGGAGE CLAIM

The gourds that Native Americans used for millennia as containers did not originate in Africa and float across the Atlantic, say experts led by Bruce Smith of the National Museum of American History. New analyses of ancient gourd fragments in the Americas suggest people carried the plant from Asia about 10,000 years ago. Thus bottle gourds are one of the oldest domesticated species.

DO DOLPHINS EAVESDROP?

Dolphins emit high-pitched clicks and gauge their distance from objects by listening to the echoes—a way of perceiving called echolocation. But a new study of rough-toothed dolphins (right), which swim in tightly coordinated formations, shows that only one animal calls at a time. Researchers at the University of Tübingen, in Germany, say the silent dolphins may listen to a pod-mate's echoing signals for the same reason lazy kids steal glances at a good student's schoolwork: to save energy.

MOUNTAIN RETREAT

THE AMERICAN PIKA IS A RABBIT RELATIVE THAT LIVES IN THE MOUNTAINS. IN RECENT DECADES, 9 OF ITS 25 KNOWN POPULATIONS IN CALIFORNIA, NEVADA AND OREGON HAVE DIED OUT. DONALD GRAYSON OF THE UNIVERSITY OF WASHINGTON FOUND THAT PIKAS, WHICH CANNOT TOLERATE SUSTAINED HEAT, HAVE BECOME RESTRICTED TO HIGHER AND HIGHER ELEVATIONS SINCE THEIR HEYDAY AT THE END OF THE LAST ICE AGE. NOW EVEN THESE CLIMATIC SANCTUARIES ARE HEATING UP. FOR PIKAS, WHICH MAKE HAY IN THE SUMMER TO EAT DURING THE WINTER, GLOBAL WARMING COULD BE THE LAST STRAW.

Observed

NAME: *Temnothorax albipennis* (an English ant)

NEAT TRICK: Tandem running, in which an experienced ant leads a naive ant from the nest to food.

NEATER TRICK: Teaching. The ants establish their route with two-way communication—the follower taps the leader's abdomen with its antennae (below, study subjects daubed with paint to tell them apart). The leader slows to one-quarter speed when it's showing another ant the way. This may be the first pupil-teacher dialogue seen in nonhumans.

AND THIS MEANS? "A big brain is not a prerequisite" for teaching, according to the study by researchers at the University of Bristol, in England.

CLOCKWISE FROM TOP LEFT: MACDUFF EVERTON / CORBIS; TED TURLINGS; GRANGER COLLECTION, NEW YORK; GRAEME CRESSWELL / NATURE PHOTOGRAPHERS LTD / ALAMY; NIGEL FRANKS AND TOM RICHARDSON; WENDY SHATTIL AND BOB ROZINSKI

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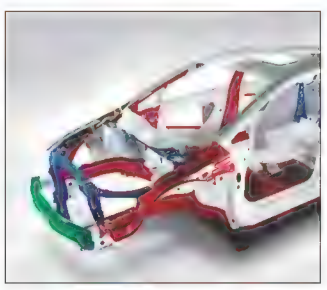

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The Power of Dreams

THE POWER OF PRAYER

A NEWS PHOTOGRAPHER IN INDIA CAPTURES A DEVOTIONAL MOMENT THAT GOES BACK A THOUSAND YEARS **BY MAURA MOYNIHAN**

IN 1993, DOUG CURRAN was covering the Indian subcontinent as a photographer for Agence France-Presse. Among many Asia hands, the assignment is considered a dream job, because of India's visual feast—its teeming universe of saints and villains, discos and temples, deserts and mountains. "In India you meet people you love and people you don't love, there is so much to do, there's always more to see, you never stop working," Curran says.

He was living in New Delhi that year, a time of hope and crisis. He documented events ranging from violent separatist movements in Kashmir to a new dynamism in India's cities to a series of cyclones, floods and famines. As the country's economy was liberated from Soviet-style planning, dot-com fortunes were being amassed.

That December, Curran made a trip that encapsulated India's vast and contradictory nature. On a swing down to Bangalore, the country's burgeoning Silicon Valley, he visited an air show to photograph jet planes, then traveled two hours further south to a religious rite in the town of Shravana Belgola, where he alighted from a taxi into a mass of people, noise and heat. Jostled from all sides, he started snapping pictures. After he made his way to an elevated platform, his eye zeroed in on a woman kneeling at the foot of a giant granite statue.

She was there "for an instant," Curran recalls. "I took the picture, then she was gone."

What Curran captured is a point on a continuum that goes back to A.D. 981, when adherents to the Jainist faith consecrated the statue. Carved from a single slab of local stone, the 57-foot-high idol represents one of the religion's

CURRAN'S EYE ZEROED IN ON A LONE WORSHIPER. "I TOOK THE PICTURE, THEN SHE WAS GONE," HE SAYS.

"When I was growing up in New Delhi, a Jain temple housed a bird hospital there."

THE ANOINTING OF THE STATUE (ABOVE, IN 1993) DATES BACK MORE THAN A THOUSAND YEARS.

most important saints, Bahubali. About every 12 years, Jains gather by the hundreds of thousands for an epic reanointing of the saint; they did so again this past February. The ritual is an outburst of color, scent and libation in a notably austere faith.

Jainism, whose origins lie in Indian prehistory, teaches that all souls are bound by karma, which is accumulated by deeds good or bad. Freeing one's soul from the cycle of reincarnation is the supreme goal, and it can be achieved only through strict discipline, renunciation of the material world and understanding how to purify karma.

Every time a life—any life—is taken, karma accrues. When I was growing up in New Delhi in the 1970s as the daughter of the American ambassador there, a Jain temple in the city housed a bird hospital where patrons could sponsor birds or release them to freedom, thereby acquiring merit. Jain monks walk the streets with fly whisks to shoo the insects away without hurting them. Some Jains wear a mask over their mouths so they won't inhale microorganisms, and they eat fruits and nuts that have been dried for more than a year to ensure they contain no living cells. And some Jain clergy undertake a fast unto death, which Jains believe is the purest way to enter nirvana.

CURRAN: "THERE'S ALWAYS MORE TO SEE."

And yet Jainism is also a religion of celebration, and its festivals, like most Indian rites, are elaborate and sensuous. The anointing of Bahubali is emphatically in that tradition.

In Jainist doctrine, Bahubali was a king's son who defeated his brother Bharata in a fight over land. Bahubali claimed the kingdom—but then, repulsed by the fight, vowed to strive for spiritual peace. He renounced the world and stood so long in repentant silence that vines grew over his limbs. Ultimately, he attained enlightenment, whereupon the vanquished Bharata honored his brother with a statue made of gold.

That statue disappeared, according to Jain mythology, but a pilgrim had a dream in which a goddess said the true image of Bahubali lay within the stone at Shravana Belgola. And thus the idol there was hewn.

Anointing an idol is a common feature of Jain rituals. But for the anointing of Bahubali, preparations begin weeks in advance, and pilgrims arrive by the thousands for preliminary events. The ceremony itself takes ten hours: celebrants play cymbals, trumpets and conch shells and sing prayers and hymns; priests arrange sacred vessels at the foot of the statue. Devotees heft the vessels to the top of a scaffold enfolding the statue, from which they pour vast quantities of blessed mixtures of milk, sugar, saffron, sandalwood, coconut and turmeric onto Bahubali's head. At the saint's feet, they strew precious stones, gold, silver and flowers.

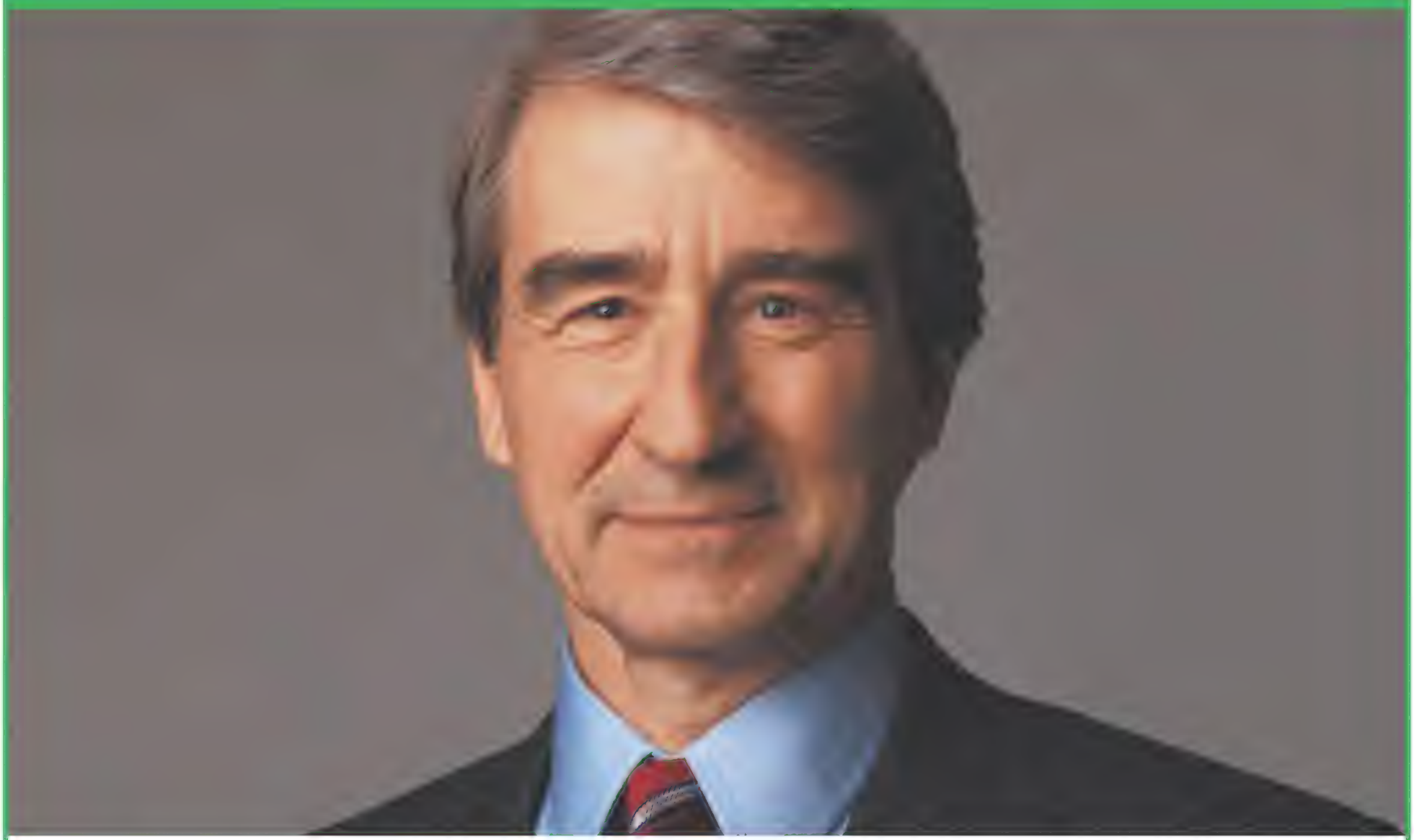
For a grand finale, a rain of flowers is released from a helicopter hovering above. (In India, ancient rituals are continually reborn and modernized.)

In 1993, Doug Curran was already 8 years into a 12-year tour of India (today he's an Agence France-Presse photo editor in Washington). He had an inkling of the spectacle that would unfold when Bahubali was anointed once again, but he had his eyes open before the fact too. And so he spotted the lone worshiper at Bahubali's feet.

If a photograph is often a timely accident, the photographer's art is perhaps an extension of the tantric ideal of "divine perception"—that is, never to see actions and objects as mundane, but always as spiritual vehicles. Curran's photograph captures a gesture of veneration that is graceful, instinctive and stunning—a moment's reverence symbolizing centuries of belief.

MAURA MOYNIHAN lived and worked on the Indian subcontinent for many years.

CHRIS LISLE / CORBIS; ANDREW COUNCILL; PP. 22,23 DOUGLAS E. CURRAN / GETTY IMAGES



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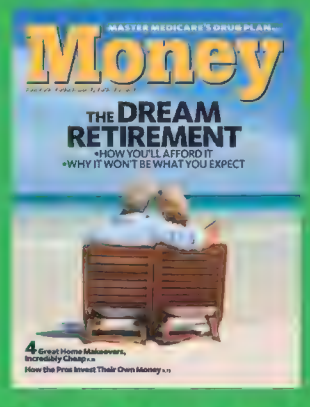

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NEON DEFINES "VINTAGE VEGAS," SAYS BRIAN ALVAREZ, LEFT, IN THE SIGN LOT WITH MELANIE COFFEE AND DAN ROMANO.

THE BEST AND BRIGHTEST

A SMALL MUSEUM ILLUMINATES LAS VEGAS' PAST BY RESTORING THE CITY'S CLASSIC NEON SIGNS **BY LAUREN WILCOX**

A VISITOR TO THE SOUTH END of the Strip in Las Vegas sees a number of objects against the night sky: the spotlight atop the pyramid-shaped Luxor Hotel, so bright it is said to be visible from outer space; the gold block letters, each several stories high, of the MGM Grand sign; the hotel Excalibur's glowing, jewel-toned turrets.

Easy to miss in the high-voltage spectacle is a small sign at the entrance to a dark and empty tract a few blocks from the MGM. "Tropicana Mobil Park," it reads, in crisp red-and-blue neon, glowing as cheerily as it has for some 40-odd years. In a few hours, it will be gone.

At six the next morning Brian Paco Alvarez, interim curator, and Dan Romano, facilities manager, of the Neon Museum wait for the "sign guys," as Alvarez calls them, to cut down the sign. Developers, who plan to put high-end shops on the site, have donated it to the Neon Museum. Established in 1996, the museum has rescued and preserved nearly 200 vintage neon signs, most of which are stored on three acres off North Las Vegas Boulevard.

Alvarez, 31, and Romano, 44, are native Las Vegans—a minority in the nation's fastest-growing city—and they share a fondness for its unselfconscious extravagance as well as a feeling of protectiveness. Alvarez, who used to be the curator of the Liberace Museum, at the other end of the Strip, is nattily dressed on this late November day in a windsor cap and muffler. He gazes admiringly at the sign, whose neon tubes are fashioned into two-foot-high letters and mounted on a kidney-shaped box. "It's a great example of Googie," he says of the part space-age, part tiki-hut design popular in the 1950s and '60s.

JEFFREY GREEN; MAP: ELIZABETH WOLF

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FIFTY YEARS AGO, LAS VEGAS BUSINESSES INSTALLED NEON SIGNS, LIKE THOSE REFURBISHED ABOVE, TO LURE CUSTOMERS TO HOTELS AND CASINOS. BELOW: THE TROPICANA SIGN AWAITS RESTORATION.

When the demolition crew arrives, the men approach their task unceremoniously, cranking up the crane and hooking the sign to a cable. A lanky guy with a droopy mustache straps himself into the bucket of a cherry picker. After dramatically lighting a welding torch with his cigarette, he cuts through the pylon supporting the sign, and it dangles from a hook.

Someone asks a worker, whose name is Warren Donlon, if he plans to take the sign down the Strip, the most direct but busiest route to the museum. "Hell, yeah!" he says with a grin.

A few minutes later, the sign, secured upright to a flatbed trailer, bumps out of the lot and rolls grandly past the New York, New York's Statue of Liberty; past the Bellagio's spectacular fountains with an eight-acre Lake Como replica; past Treasure Island's frigate, yawing in a miniature sea; and on past the dappled piazza of the Venetian. None of those attractions was even built when the trailer park's sign was first bolted to a pole on what was then the outskirts of town.

Probably the most eye-catching symbol of midcentury American kitsch, neon signs trace their heritage to 1910, when the French chemist Georges Claude invented the neon lamp by applying an electric discharge to a sealed tube of neon gas. Soon after Las Vegas got its first neon sign, in 1929, hotels, restaurants and casinos began trying to outshine one another. A half century ago, the city's sun-bleached motels and casinos, dwarfed in the daytime by the sweep of the sky and the expanse of the desert, came brilliantly, cartoonishly alive after dark.

Flashing, rippling neon constructions such as the iconic pink feathers on the Flamingo Hotel and the Stardust's shimmering cluster of "stars" still light up the Vegas sky. But not for long. Though the city requires new downtown construction to include at least one element of neon, the art form's heyday is over, dimmed by tasteful coved lighting in family-friendly megaresorts and by giant video screens. Even the Stardust sign, a mix of neon and bulbs, is scheduled for demolition next year. Alvarez says up to 80 percent of Las Vegas' vintage signs will be torn down in the next two years.

Alvarez, Romano and the museum's director, Melanie Coffee, keep tabs on planned demolitions, haunting the avenues where the great old signs still blink to life. The museum has restored 11 signs and installed them in outdoor galleries: there's a 1940s Indian chief in neon headdress, a glittery cowboy on horseback and a ten-foot-tall martini glass garnished with a neon cherry—testaments to that curious Vegas mix of Wild West and casino chic.

But the museum keeps most of its finds in outdoor lots called the Boneyard. It's a maze of faded letters, some as big as houses, as well as 3-D pieces, such as the crown from the Royal Nevada Hotel, its puff of fiberglass velvet dented and drab, and a giant high-heeled shoe that once sparkled with a thousand incandescent bulbs. When the Tropicana sign arrives, Romano and Alvarez debate where to put it.

"By Aladdin's Lamp," Romano says. "To create some drama in that area."

"You could put it over by the Jackpot," says Alvarez, referring to a large sign from the Jackpot Motel, "although that might be a lot of blue."

"We could move the tam," Romano says, pointing to a Chevy-size beret in a green-and-black plaid, from the Tam O'Shanter Motel. Alvarez agrees.

While a co-worker climbs gingerly onto the tam and attaches a cable, Donlon looks around the Boneyard. "I've blown up some of these signs," he says. "I set the explosives on top of the Dunes sign when they imploded the hotel." The Dunes, a landmark razed during the 1990s development boom, had a distinctive minaret-shaped sign.

Alvarez looks pained. "That sign was fully restored!" he exclaims.

"Yep," Donlon says genially. "We tipped it right over. It was cool."

"I watched that implosion with my mother," Alvarez says. "We were wearing black—we were in mourning—and my mother was crying. She said, 'Your father and I tried to rekindle our love at that hotel.'"

After the crane deposits the tam in its new spot, it hoists the Tropicana Mobil Park sign from the flatbed. The crew guides it with straps as if walking a balloon in the Macy's parade. Up close, the sign is much more imposing than it was on the avenue.

Their work done, the sign guys pull out of the lot. Romano shuts the chain-link fence and locks it. With his cellphone, Alvarez snaps a photo of the sign through the fence. He gives it a little wave. "Welcome home," he says.

LAUREN WILCOX is a freelance writer living in Jersey City, New Jersey.

JEFFREY GREEN (3); LAUREN WILCOX

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- Take one BONIVA 150-mg tablet in the morning of your chosen day (see **"How should I take BONIVA?"**).

What to do if I miss a monthly dose:
- If your next scheduled BONIVA day is more than 7 days away, take one BONIVA 150-mg tablet in the morning following the day that you remember (see **"How should I take BONIVA?"**). Then return to taking one BONIVA 150-mg tablet every month in the morning of your chosen day, according to your original schedule.
- **Do not** take two 150-mg tablets within the same week. If your next scheduled BONIVA day is only 1 to 7 days away, **wait** until your next scheduled BONIVA day to take your tablet. Then return to taking one BONIVA 150-mg tablet every month in the morning of your chosen day, according to your original schedule.
- **If you are not sure what to do if you miss a dose, contact your health care provider who will be able to advise you.**

Schedule for taking BONIVA 2.5 mg once daily:
- Take one BONIVA 2.5-mg tablet once a day first thing in the morning at least 1 hour (60 minutes) before you eat, drink anything other than plain water, or take any other oral medicine (see **"How should I take BONIVA?"**).

What to do if I miss a daily dose:
- If you forget to take your BONIVA 2.5-mg tablet in the morning, **do not** take it later in the day. Just return to your normal schedule and take 1 tablet the next morning. **Do not** take two tablets on the same day.
- **If you are not sure what to do if you miss a dose, contact your health care provider who will be able to advise you.**

What should I avoid while taking BONIVA?
- Do not take other medicines, or eat or drink anything but plain water before you take BONIVA and for at least 1 hour (60 minutes) after you take it.
- Do not lie down for at least 1 hour (60 minutes) after you take BONIVA.

What are the possible side effects of BONIVA?
Stop taking BONIVA and call your health care provider right away if you have:
- **pain or trouble with swallowing**
- **chest pain**
- **very bad heartburn or heartburn that does not get better**

BONIVA MAY CAUSE:
- pain or trouble swallowing (dysphagia)
- heartburn (esophagitis)
- ulcers in your stomach or esophagus (the tube that connects your mouth and stomach)

Common side effects with BONIVA are:
- diarrhea
- pain in extremities (arms or legs)
- dyspepsia (upset stomach)

Less common side effects with BONIVA are short-lasting, mild flu-like symptoms (usually improve after the first dose). These are not all the possible side effects of BONIVA. For more information ask your health care provider or pharmacist.

Rarely, patients have reported severe bone, joint, and/or muscle pain starting within one day to several months after beginning to take, by mouth, bisphosphonate drugs to treat osteoporosis (thin bones). This group of drugs includes BONIVA. Most patients experienced relief after stopping the drug. Contact your health care provider if you develop these symptoms after starting BONIVA.

What is osteoporosis?
Osteoporosis is a disease that causes bones to become thinner. Thin bones can break easily. Most people think of their bones as being solid like a rock. Actually, bone is living tissue, just like other parts of the body, such as your heart, brain, or skin. Bone just happens to be a harder type of tissue. Bone is always changing. Your body keeps your bones strong and healthy by replacing old bone with new bone.

Osteoporosis causes the body to remove more bone than it replaces. This means that bones get weaker. Weak bones are more likely to break. Osteoporosis is a bone disease that is quite common in women after menopause. At first, osteoporosis has no symptoms, but people with osteoporosis may develop loss of height and are more likely to break (fracture) their bones, especially the back (spine), wrist, and hip bones.

Osteoporosis can be prevented, and with proper therapy it can be treated.

Who is at risk for osteoporosis?
Talk to your health care provider about your chances for getting osteoporosis.

Many things put people at risk for osteoporosis. The following people have a higher chance of getting osteoporosis:

Women who:
- are going through or who are past menopause ("the change")
- are white (Caucasian) or Oriental (Asian)

People who:
- are thin
- have a family member with osteoporosis
- do not get enough calcium or vitamin D
- do not exercise
- smoke
- drink alcohol often
- take bone thinning medicines (like prednisone) for a long time

General information about BONIVA
Medicines are sometimes prescribed for conditions that are not mentioned in patient information. Do not use BONIVA for a condition for which it was not prescribed. Do not give BONIVA to other people, even if they have the same symptoms you have. It may harm them.

Store BONIVA at 77°F (25°C) or at room temperature between 59°F and 86°F (15°C and 30°C).

Keep BONIVA and all medicines out of the reach of children.

This summarizes the most important information about BONIVA. If you would like more information, talk with your health care provider. You can ask your health care provider or pharmacist for information about BONIVA that is written for health professionals.

For more information about BONIVA, call 1-888-MY-BONIVA or visit www.myboniva.com.

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[*Ray Charles' Ray-Bans, 1990s*
NATIONAL MUSEUM OF AMERICAN HISTORY]

HUGH TALMAN / NATIONAL MUSEUM OF AMERICAN HISTORY, S.I.

VISIONARY VIRTUOSO

RAY CHARLES' FUSION OF GOSPEL AND BLUES CHANGED THE FACE OF AMERICAN POPULAR MUSIC **BY OWEN EDWARDS**

RAY CHARLES, who died at age 73 on June 10, 2004, lives on in America's collective inner ear. So much so that it's a challenge to think of anyone else who ever performed such songs as "Georgia On My Mind," "What'd I Say" and "You Don't Know Me." And if anyone other than Charles ever sang a more heartfelt, heart-stirring version of "America the Beautiful," I haven't heard it. Perhaps there is no more telling measure of the man's musical genius than that in a business where the bond between audiences and performers is as much visual as vocal, we listened to Charles and watched him during his long career without ever once making eye contact. In this singer's case, the window to the soul was the ear, not the eyes.

But who could take their eyes off Ray? He had the nonchalance of transcendent talent—he could make brilliance look easy. "Music to me is just like breathing," Charles once

"Music to me," Ray Charles once said, "is just like breathing."

CHARLES (IN PARIS WITH MUSICIAN HENRI SALVADOR, 1996) TOLD THE *NEW YORK TIMES* THAT YEAR: "MY MOM TAUGHT ME, 'BE YOURSELF.'"

told an interviewer. "It's part of me." And when we watched him sway to the rhythm of his songs like some living metronome, we focused on his jubilant smile and ever-present sunglasses. Those lenses were both fact and metaphor, reflecting his audiences as his songs reflected the emotions of fans who spanned generations.

In September 2004, John Edward Hasse, curator of American music at the Smithsonian's National Museum of American History (NMAH), and Melinda Machado, the museum's director of public affairs, visited the Los Angeles studio built for Charles in 1962 where the singer recorded his songbook of unforgettable hits. The pair hoped to acquire an object symbolizing the performer who orbits in the galaxy of Bing Crosby, Judy Garland, Frank Sinatra and Ella Fitzgerald. "We had decided," Machado says, "that if there was only one thing we could get, it had to be a pair of Ray's sunglasses."

Joe Adams, an actor who was Charles' longtime manager and the designer of many of his performance outfits, arranged the visit. "As we walked in," Machado recalls, "I felt that Ray Charles was very present." Hasse, the founder of national Jazz Appreciation Month and an accomplished musician himself, got a chance to play a series of blues improvisations on one of the studio pianos. "I was inspired just to be there," he says.

The custom-made jackets and tuxedos Charles wore for concerts and television appearances hung in a large, open closet. His collection of sunglasses was in a cabinet against one of the walls. "Ray liked variety," Adams said, "so he wore different styles." But to Hasse and Machado, a particular pair, with wide earpieces, seemed the most familiar and characteristic . . . Ray's Ray-Bans.

Adams donated the glasses—as well as three stage costumes, a Yamaha KX 88 keyboard marked in Braille, a chess set for the blind and two concert programs—in a ceremony at the museum this past September 21. Visitors to NMAH can see them through the summer at an exhibition titled "Ray Charles: The Genius." In one of two glass cases, a mannequin wears a gold-sequined dinner jacket and black trousers. Where the mannequin's head should be, the famous shades float in midair at eye level. "The exhibition," says Adams, "brings back a lot of memories . . . good ones. We covered a lot of ground together." To which those of us who still see ourselves reflected in the glasses of one of our brightest stars might simply add: "Amen."

OWEN EDWARDS is executive editor of Edutopia, *a magazine about education.*

ERIC FOUGERE / KIPA / CORBIS

SPAIN MAKES A STAND

AFTER MORE THAN 400 YEARS, A FORT BUILT BY CONQUISTADORS IN THE CAROLINAS HAS FINALLY BEEN FOUND **BY ANDREW LAWLER**

JUAN PARDO REPORTEDLY GAVE THE JOARA CHIEF EIGHT KNIVES.

In the foothills of the Appalachians, I park in a cornfield just off an unmarked dirt road. A canvas canopy is the only structure visible in the quiet valley, where two dozen archaeologists and community college students are braving the July sun in loamy trenches. The team is uncovering the ruins of Fort San Juan, the oldest known European settlement in the interior of the United States.

The fort, five miles north of Morganton, North Carolina, was part of Spain's attempt in the 1560s to extend its domination of the Americas north into what is now the southeastern United States. Until now its location was only hypothesized.

Archaeologist David Moore, a lanky transplant from California who has acquired a courtly North Carolina accent, first came to this site in 1986. He was interested in the history of Native Americans in the region. A century earlier, a Smithsonian scientist had documented an Indian mound here, so Moore thought it would be a good place to look. During a few weeks of digging, he found plentiful evidence of a large and vibrant 16th-century Indian town, including one particularly intriguing find—an iron knife of European origin. Moore assumed that the knife, which would have been extremely valuable to the Natives, made its way to the village through trade with Spanish explorers or later English settlers.

The Spanish conquistador Hernando de Soto had made a foray into this area in the 1540s. Two decades later, a more obscure conquistador, Juan Pardo, had established a series of forts here. Arriving in 1566 in Santa Elena, the would-be Spanish capital of continental America on what is now Parris Island, South Carolina, Pardo was ordered by the governor to secure the interior, scout out sources of gold and silver, and find a route to the silver mines of central Mexico.

Pardo marched off with 125 soldiers and founded Fort San Juan next to a town called Joara, established by the Catawba tribe (or perhaps its ancestors). He left 30 men at the fort when he returned to Santa Elena to fend off an anticipated attack by the French, whose fort the Spanish had recently burned down. In the fall of 1567, Pardo returned to the interior, traveling in what is now Tennessee, North Carolina and South Carolina, and built more forts to serve as supply posts on the way back to Santa Elena. Fort San Juan lasted no more than 18 months, until the Catawba burned it down. Only one soldier survived to tell the story. Native antipathy toward the Spaniards, inadequate food supplies and the swampy location of Santa Elena forced the overstretched Spanish Empire to abandon its attempt to colonize the region two decades later.

In January 1994, a 25-year-old archaeologist named Robin Beck and his brother, Kevin, were poking around the site that

STANFELLOWS.COM

Moore had studied several years earlier. Their aunt and uncle, Pat and James Berry, own the land. As a kid Robin had collected Indian ceramics and arrowheads here, carefully storing the artifacts; as a teenager he had watched Moore dig. On that winter day, however, Robin found not Indian relics but pieces of grayish European pottery, and Kevin found an old nail; both turned out to be of Spanish origin. Robin Beck rushed to see Moore, a professor at Warren Wilson College in nearby Asheville. Moore excitedly pulled out pieces of the same type of pottery. (Moore had been told by other experts, mistakenly, that the pottery was made by 18th-century settlers.) It was then that Beck and Moore realized that the fragments could have come from the long-lost Fort San Juan.

Beck, now a visiting professor of anthropology at Northwestern University, recalls that he was eager to announce they had found the fort on his family's land. Moore was also convinced they'd found the fort, but he argued that they needed more evidence before making such a bold claim. The objects, after all, might have been traded to Indians who lived at or near the site.

Moore, Beck and a third colleague, Christopher Rodning, now at Tulane University in New Orleans, set out to gather more data. They discovered the remains of five large burned buildings next to the Indian mound, providing dramatic evidence of a fort that had come to a fiery end.

The site looked "ritually covered" by Natives eager to erase any trace of the invaders, says David Moore.

By the end of the 2004 field season, the researchers had uncovered a large section of one of those buildings. In style it resembled a Catawba dwelling, but at 25 feet long, it was built on a European scale. Blackened dirt and ashen remains of the wooden posts that supported the structure are as vivid as a campfire put out yesterday. The team found roof beams that had collapsed inward during the fire and benches with their cane matting still intact. Perched on a bench was an Indian pipe. Nearby were two fragments of chain mail. The site was undisturbed, "almost as if it was ritually covered" by Natives eager to erase any trace of the invaders, says Moore.

Moore and his two colleagues have a paid staff of six and an enthusiastic volunteer workforce of more than two dozen. The excavation has a familial feel; Rodning's mother churns out pizzas and pies for the hungry group. The archaeologists are trying to extend that communal feeling by opening the excavation to the public during a summer weekend, an event that draws hundreds of the curious, including members of the Catawba Nation, who may be descendants of the Joara villagers.

During a lunch break at the site, Moore brings out the precious artifacts—nails, lead shot and a small piece of majolica from a 16th-century medicine jar. He notes that such materials were not trade items; nails were exceedingly rare in Spanish inventories in the New World, and guns and ammunition too precious to part with.

Moore adds that it will take years to uncover the other buildings, determine the extent of the Indian town, and piece together the intriguing story of the interactions between the Spanish and the Indians. Though it is clear the Spanish made themselves unwelcome in the end, the relationship appears to have been peaceful in the beginning. The very site of the Spanish compound—abutting the Indian mound—signals cordial relations, and the architecture of the fort strongly hints at a collaborative construction effort in the early days.

Archaeologists have so far failed to find evidence of any of the other Spanish forts that, according to expedition accounts, conquistadors built in the interior in the mid-1500s. Their remains may be lost forever, along with the innumerable Native mounds that have been plowed under in the Carolinas. For now, Moore is still giddy at his and his colleague's luck in stumbling on this evidence of the Spanish Empire's brief foothold.

ANDREW LAWLER wrote about Iran's archaeological treasures in May 2004.

ARCHAEOLOGISTS (DIGGING AT FORT SAN JUAN) ARE TRYING TO LEARN WHAT WENT WRONG BETWEEN THE SPANISH AND INDIANS (ABOVE, A RECOVERED IRON KNIFE) BEFORE THE FORT BURNED.

DAVID MOORE (2)

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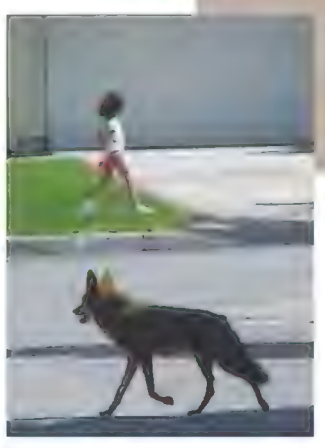
CITY SLINKERS

WHY ARE COYOTES, THOSE CUNNING DENIZENS OF THE PLAINS AND RURAL WEST, MOVING INTO URBAN CENTERS LIKE CHICAGO AND WASHINGTON, D.C.? **BY CHRISTINE DELL'AMORE**

KEN FEREBEE was one of the first to notice. He's a National Park Service biologist assigned to Rock Creek Park, a 1,755-acre swath of woods, ball fields and picnic areas in the heart of Washington, D.C. Since 2004, he'd observed that deer killed by cars were mysteriously being dragged away, and he'd heard strange yips and yowls. Then, a year ago, he saw a coyote dart across a road just after dawn.

The coyote, that cunning canine of wide-open spaces, has come to the nation's capital. And to New York, Chicago, Los Angeles and other cities. In fact, coyotes have spread to every corner of the United States, shifting their behaviors to fit new habitats and spurring researchers to cope with a worrisome new kind of carnivore: the urban coyote.

In a clearing near the edge of Rock Creek Park, Ferebee stomps through dense thornbushes and peeks under the roots of a fallen tree at a coyote den. He says it probably sheltered newborn pups a few months earlier. Ferebee says that largely because of their taste for livestock, "Coyotes have a bad rap, like wolves." He stoops to look for coyote scat. "We're not going to catch them," he adds. "I don't see it as a bad thing for a park. I see it as good for keeping animal populations in control, like the squirrels and the mice."



COYOTES IN DENSELY POPULATED AREAS (INSET, A LOS ANGELES SUBURB) CAN BE ALARMING. BUT WILDLIFE EXPERTS SAY THEY FILL A NICHE IN THE URBAN ECOLOGY.

Coyotes originally inhabited the middle of the continent, between the Rocky Mountains and the Mississippi River, and Alberta, Canada, and central Mexico. In 1804, Lewis and Clark dubbed the animal the "prairie wolf." In 1823, naturalist Thomas Say gave it the Latin name *Canis latrans*, or barking dog. One of its most celebrated traits is its trickiness; coyotes have been outsmarting trappers for centuries. Recently, biologist Jon Way, who has been studying the predators in Massachusetts, set a trap near the Boston Airport. Coyotes somehow snagged the rib meat put out as bait without getting caught. In the Navajo version of the creation of the world, old men had just finished embroidering the sky in brilliant patterns when the trickster Coyote ran across their work, scattering the stars.

The coyote's craftiness made the animal a notorious pest to Western sheep farmers and, occasionally, cattle ranchers. In the mid-19th century, cowboys carried sacks of strychnine in their saddlebags to inject into animal carcasses, to poison the coyotes that scavenged them. A 1927 *Literary Digest* article said Kansas ranked the coyote "in the category of evils alongside beer, cigarettes and Wall Street." Ranchers and hunters, as well as a federal agency called Predator and Rodent Control—a forerunner of today's Wildlife Services—trapped, shot and poisoned more than a million coyotes in the 1900s. It's still one of America's most hunted animals; in 2003, Wildlife Services killed 75,724 of them.

Yet the coyote has persevered. By the end of the 20th century, the animal had colonized the tundra of Alaska, the tropical forests of Panama and the urban jungle of New York City. (The only major landmass in the eastern United States where you can't find the coyote is Long Island, although they have been spotted trying to swim across Long Island Sound.) How has the coyote pulled off this extraordinary feat? "I guess if

WENDY SHATTIL AND BOB ROZINSKI; TROY BOSWELL / LOS ANGELES ANIMAL SERVICES

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you wanted to use one word, it'd be 'plasticity,'" says Eric Gese, a predator ecologist at Utah State University. Coyotes can live alone, as mated pairs, or in large packs like wolves; hunt at night or during the day; occupy a small territory or lay claim to 40 square miles; and subsist on all sorts of food living or dead, from lizards and shoes, to crickets and cantaloupes. Although their native diet consists of small rodents, Gese has seen a pack take down a sick elk in Yellowstone National Park. "Coyotes are without a doubt the most versatile carnivores in America, maybe even worldwide," says Marc Bekoff, an animal behaviorist who has studied them for 30 years.

People unwittingly helped coyotes flourish when they exterminated most of the wolves in the United States. Coyotes became top dog, filling the wolf's ecological niche. Deforestation and agriculture opened up previously dense tracts of forest, and human settlements, with their garbage, vegetable gardens, compost piles and domestic pets, provided food.

The expansion of coyotes into urban areas, though, is recent. Until the 1990s, the farthest that coyotes had ventured into Chicago was to forested reserves near the city limits. But "something happened," says Stan Gehrt, a wildlife biologist at Ohio State University, "something we don't completely understand." Within ten years the coyote population exploded, growing by more than 3,000 percent, and infiltrated the entire Chicago area. Gehrt found territorial packs of five to six coyotes, as well as lone individuals, called floaters, living in downtown Chicago. They traveled at night, crossing sidewalks and bridges, trotting along roads and ducking into culverts and underpasses. One pair raised pups in a drainage area between a day care facility and a public pool; a lone female spent the day resting in a tiny marsh near a busy downtown post office. Perhaps most surprising to Gehrt, Chicago's urban coyotes tended to live as long as their parkland counterparts. No one knows why coyotes are moving into cities, but Gehrt theorizes that shrewder, more human-tolerant coyotes are teaching urban survival skills to new generations.

In Southern California, where coyotes have been living among people since the onset of urban sprawl after World War II, the animals have become more numerous in the past 20 years or so. There have been at least 160 attacks on people in the United States in the past 30 years, most in the Los Angeles County area. The majority were bites, often inflicted while people were protecting their pets. One coyote attack, on a 3-year-old girl playing in her front yard in Glendale in 1981, was fatal. Afterward, residents of the Los Angeles suburb started a campaign to educate people about not feeding coyotes or leaving pet food and garbage unsecured. That, plus an intensive trapping program in the neighborhood, cut down on the coyote population.

> "Something happened. Something we don't completely understand."

URBAN COYOTES, SAYS STAN GEHRT (WITH A CHICAGO PUP), LIVE AS LONG AS RURAL ONES.

The coyote's affinity for life in the big city has surprised many researchers. But odder still is the coyote's propensity for breeding with wolves. Canine species within the genus *Canis*, which includes coyotes, wolves and domestic dogs, are capable of interbreeding, but they usually stick with their own kind. The "coywolf" hybrid is larger than a purebred coyote. It is found in northeastern Minnesota, southern Ontario and southern Quebec, Maine and New York. Researchers recently studied the genetic profiles of 100 coyotes killed by hunters in Maine. Of those animals, 23 had some wolf genes. Most crosses occur between male wolves and female coyotes. Some of the hybrids go on to mate with other hybrids, creating what one researcher calls a "hybrid swarm" that has the potential to evolve into a new species. Eastern coyotes are heftier than those in the West: one coyote in Maine tipped the scales at 68 pounds, a far cry from the slim 15-pounders in the Great Plains. Researchers don't know if the larger Eastern coyotes carry wolf genes or have independently evolved a larger size. Or they may just have a richer diet, with plenty of access to deer.

Should the urban coyote be viewed with trepidation? "Some people have fears that kids are going to be the next ones to be eaten," says Way. "I tell them coyotes have been at the edges of their neighborhoods for years." Way emphasizes coyotes can be an asset to urban ecosystems, keeping a check on deer, rodents, Canada geese and other animals that thrive on the suburbs' all-you-can-eat buffet.

At his office in Rock Creek Park, just out of range of the park's eerie coyote choruses, Ken Ferebee flips through photographs of the capital's coyotes, taken by a motion-sensitive camera installed in the park. He pauses at one arresting shot: two burly coyotes stare into the camera, heads tilted, yellow eyes glinting. Their expression and confident stance defy the stereotype of a cowardly varmint always running the other direction. These coyotes look curious, fearless and eager to explore the big city.

CHRISTINE DELL'AMORE is a health reporter for United Press International.

MAX MCGRAW WILDLIFE FOUNDATION

AMERICAN COMIC

A BENCHMARK EXHIBITION REVEALS THE LIGHTER SIDE OF ARTIST GRANT WOOD

"COMEDY is nothing more than tragedy deferred," the essayist Pico Iyer has written. For the painter Grant Wood, best known for his 1930's *American Gothic*, the tragedy is that most of his comedy has been deferred so long. But Wood's gentle playfulness is now on display in the most comprehensive exhibition on the artist to date. Created by the Cedar Rapids Museum of Art and opening this month at the Smithsonian American Art Museum's Renwick Gallery in Washington, D.C., the show featuring more than 170 of his works demonstrates that he was as comfortable with cast iron as watercolors and oil, producing everything from wry portraits to whimsical decorations. He created flower arrangements from found wire and clothespins and called them *Lilies of the Alley*.

GRANT WOOD (SELF PORTRAIT, C. 1932) LAMPOONED NAUGHTY CHILDREN WITH HIS PRINCIPAL'S BENCH (TOP), WHICH HE CRAFTED FOR AN IOWA JUNIOR HIGH SCHOOL IN 1922 WHERE HE WORKED AS AN ART TEACHER.

When Wood started out as an artist in Cedar Rapids, Iowa, in the early 1920s, he painted in an impressionistic, Monet-like style and kept his jokes to himself. Only friends saw his cartoon of three Indians stealing flannel pajamas off a clothesline and the coffin lid that he made into a door for his studio. "It wasn't until he felt comfortable that he really began to use his humor," says Renwick curator Jane Milosch.

While working as an art teacher at McKinley Junior High School in 1922, Wood made perhaps his first attempt at mixing his fine art with his refined wit: he built a mission-style bench for misbehaving students who had been sent to the principal's office. Into the oak posts Wood carved caricatures of unruly youths, and along the top rail he engraved: "The way of the transgressor is hard." Called *Mourners' Bench*, the hot seat was used by the school until 1970. "I certainly had no idea that it was made by a genius," says retired lawyer Don Ribble, 75, who sat on the bench in the 1940s. "I don't remember it all that well, probably because I was too worried about seeing the principal."

Wood's signature painting style began to take shape only after he traveled to Munich in 1928 to supervise the production of a stained-glass window he had designed for the Cedar Rapids Veterans Memorial Building. He saw the works from an art movement called the *Neue Sachlichkeit* (New Objectivity), whose adherents were reacting against abstraction by emphasizing realism. Back at home, Wood began painting

GRANT WOOD AND NINTH GRADE STUDENTS AT WILLIAM MCKINLEY SCHOOL / CEDAR RAPIDS MUSEUM OF ART, CEDAR RAPIDS COMMUNITY SCHOOL DISTRICT; GRANT WOOD / FIGGE ART MUSEUM

MORE THAN JUST A REGIONAL PAINTER: WOOD (DETAIL OF HIS PRINCIPAL'S BENCH) OFTEN CARICATURED HIS FRIENDS.

graphic scenes of hardworking farmers and wide, rolling cornfields. He later became one of the leading proponents of regionalist art, even dressing the part in bib overalls. "All the really good ideas I've ever had came to me while I was milking a cow," said Wood. "So I went back to Iowa."

But Wood's humor wasn't all fun and games. When the local chapter of the Daughters of the American Revolution protested his stained-glass window because it had been manufactured abroad, he made a satirical painting of three smug, well-coifed septuagenarians called *Daughters of Revolution*.

Wood, who died of cancer in 1942 at age 50, insisted that *American Gothic*, with its stern farmer and daughter, wasn't a true parody. Rather, he saw the humor in the painting as, well, lifelike. "There is satire in it," he once said. "But only as there is satire in any realistic statement. These are types of people I have known all my life. I tried to characterize them truthfully—to make them more like themselves than they were in actual life."

—ULRICH BOSER

BLACK HISTORY

If all goes as planned, a new National Museum of African American History and Culture will occupy a prominent five-acre site on the National Mall near the Washington Monument, the Smithsonian's Board of Regents announced January 30. Advocates have long pushed for such a museum, which Congress authorized in 2003. The 19th Smithsonian museum is slated to open in 2016 and cost up to $400 million. Secretary Lawrence M. Small said it will inspire visitors with "truly American stories of perseverance, courage, talent and triumph."

TALKING BONES

The 9,500-year-old skeleton known as Kennewick Man is finally giving up some of its secrets, to scientists led by Smithsonian forensic anthropologist Douglas Owsley. The anthropologist was scheduled to announce the team's findings February 23 at a meeting of the American Academy of Forensic Sciences, in Seattle. The skeleton, one of the oldest and most complete in North America, was found in 1996 along the banks of the Columbia River in Kennewick, Washington. Scientists eager to study it were blocked after Native American tribes argued that the remains should be reinterred. The dispute prompted authorities to entrust Kennewick Man to Seattle's Burke Museum. In 2005, a three-judge panel affirmed a ruling in favor of the scientists, and this past summer Owsley's team went to work on the remains of the 35- to 40-year-old man who died 7,000 years before Plato. The researchers took more than 340 highly detailed photographs of the fossilized bones and used a CAT scanner to make casts of the skull and right hip, where a spear point was embedded. The team also closely analyzed the wear and tear on the bones. "We can reconstruct the positioning of the body as it was laid out . . . and answer the question of whether or not he was buried," Owsley says. "It's an interesting set of observations that most never thought possible."

—BETH PY-LIEBERMAN

DOUGLAS OWSLEY (RIGHT, EXAMINING KENNEWICK MAN AT THE BURKE MUSEUM WITH SMITHSONIAN RESEARCHER KARIN BRUWELHEIDE) INSISTS THE SKELETON HAS MORE TO SAY.

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Joy of Science

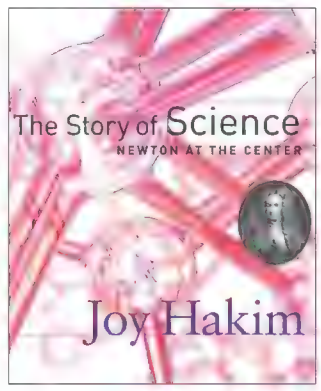
An award-winning author's view of teaching Darwinian evolution is anything but textbook

"TO BE A COMPLETE HUMAN BEING," SAYS HAKIM, "YOU NEED MORE THAN THE LAWS OF PHYSICS."

JOY HAKIM, author of the middle-school American history series The History of US, has been called the "J. K. Rowling of textbooks" because of her lively writing style and blockbuster book sales—more than four million so far. This past fall, Smithsonian Books released *Newton at the Center*, the second of six volumes in her new science series. We spoke with Hakim not long after a Pennsylvania court ruled that the Dover school district could not teach intelligent design in science classes and had to continue teaching evolution. That ruling struck the iconoclastic, 75-year-old Hakim, who describes herself as religious and yet skeptical, as just about right.

How are you going to handle evolution in your books?

I am going to start the fourth book with the earth as a character. Kids tend to think of the earth as static, but it began as a huge, seething asteroid. It got whammed and banged, and there were ice ages. Then life-forms begin, and evolution just happens, from basic life-forms to you and me. I have six or seven chapters written on Darwin, but I will talk about intelligent design. Most scientists have a snotty contempt for an awful lot of our population. I will make it clear that [intelligent design] is not a scientific idea, but surely God *could* have done it all. I certainly hope there is one.



Should evolution and intelligent design be taught side by side?

We need to recognize that there is science and there is faith, and they are both important. I hope we aren't just some kind of amazing accident. But science is about things that are provable. So far, we can't prove God.

That's what the Dover decision came down to: a science class is about teaching provable things.

But we also need to teach history of religion. Schools are frightened to say anything about religion. If you had been a scientist in 1899, you would have believed that the universe was infinite and that it had existed forever. Chances are you would have been an atheist. But with modern science and the Big Bang, we have a Creation story. It's amazing how much that has helped bring science and religion together. The pope has blessed the Big Bang theory. A lot of physicists are becoming more interested in religious philosophy. The brouhaha on teaching evolution in schools is diverting us from an exciting embrace. —*JENNIFER DRAPKIN*

HURRY IN

Spanish explorers would have killed (and did) for a collection of Colombian gold as large as the one on view at the National Museum of Natural History through April 9.

A FUNERARY MASK, 100 B.C. TO A.D. 800, IS IN "THE SPIRIT OF ANCIENT COLOMBIAN GOLD" SHOW.

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THIS MONTH IN HISTORY

MARCH ANNIVERSARIES—MOMENTOUS OR MERELY MEMORABLE

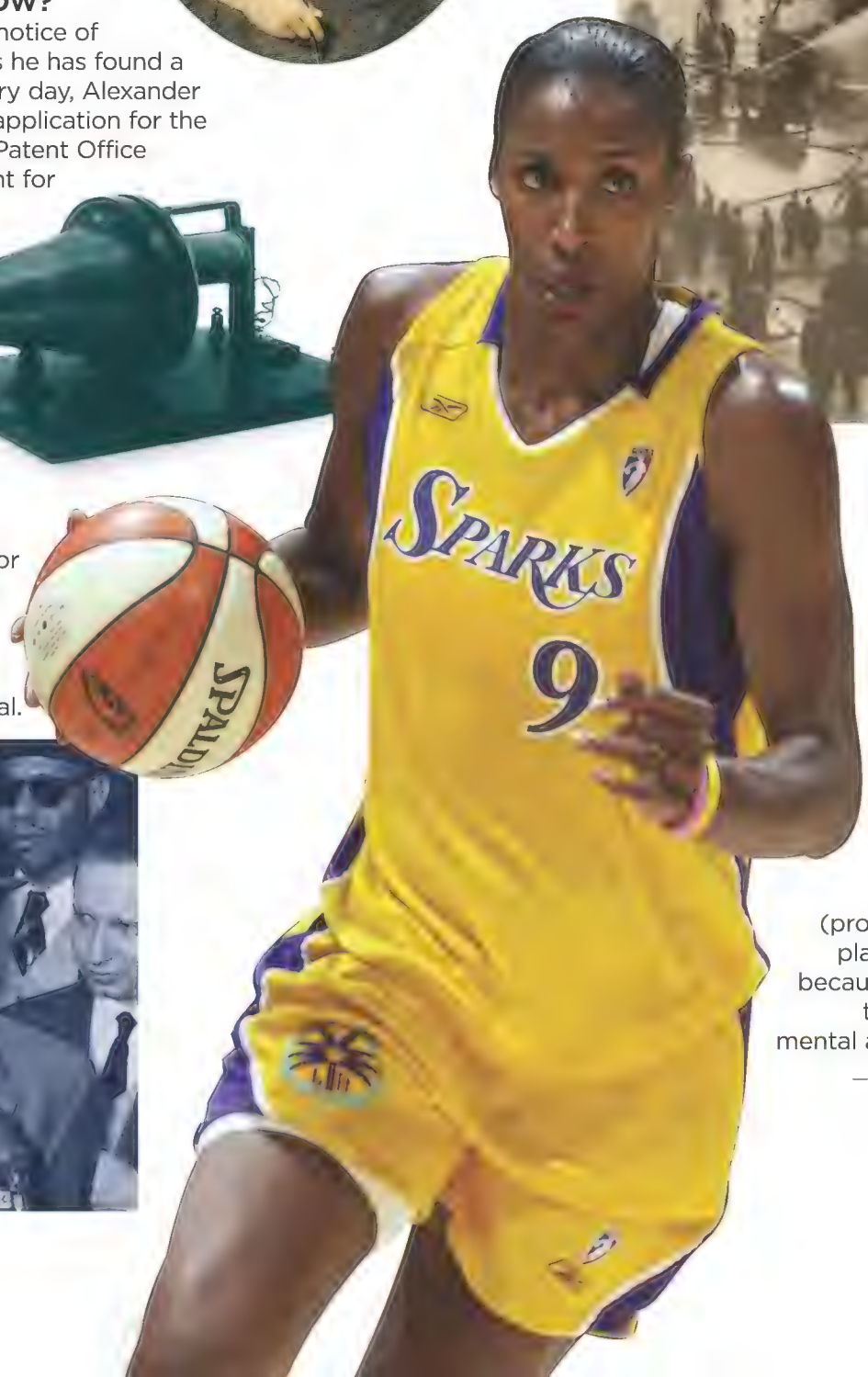
25 YEARS AGO: ATTEMPTED ASSASSINATION
John Hinckley Jr., vying for actress Jodie Foster's attention, shoots President Ronald Reagan on March 30, 1981, in Washington, D.C. "Honey, I forgot to duck," the 70-year-old leader tells his wife, Nancy. In December 2005, a judge grants Hinckley, committed to a psychiatric hospital, permission to visit his parents in Virginia.

200 YEARS AGO: HOW DO I LOVE THEE?
Poet Elizabeth Barrett Browning is born on March 6, 1806, in England. Her verse garners her many admirers, including the poet Robert Browning. Her greatest work, *Sonnets from the Portuguese*, is inspired by their secret courtship and their marriage. In 1861, Browning, suffering from poor health, dies at age 55 from a bronchial attack in the arms of her husband.

130 YEARS AGO: CAN YOU HEAR ME NOW?
February 14, 1876, inventor Elisha Gray files a "notice of invention" at the U.S. Patent Office; he believes he has found a way to electrically transmit speech. On that very day, Alexander Graham Bell files an application for the same invention. The Patent Office awards Bell the patent for the telephone on March 7, 1876.

50 YEARS AGO: GUILTY KING
Martin Luther King Jr. is found guilty of violating an antiboycott law, March 22, 1956, for leading the citizens of Montgomery, Alabama, in a boycott of city buses. King pays a $500 fine. Segregation on buses officially ends December 21, 1956, after the Supreme Court upholds a decision declaring it unconstitutional.

95 YEARS AGO: BURNING MAYHEM
On March 25, 1911, a fire erupts in the Triangle Shirtwaist Company in New York City, forcing some of the workers, trapped inside by locked doors and a lack of fire escapes, to jump to their deaths. Firemen are "crushed to the pavement by the rain of falling bodies," reports the *Chicago Daily Tribune*. Nearly 150 lives are lost. The industrial disaster leads to the creation of factory fire codes and child labor laws.



100 YEARS AGO: GOT GAME
At an athletic convention on March 30, 1906, Dr. Dudley Sargent of Harvard University warns that sports such as basketball are harmful to women (professional basketball player Lisa Leslie, left) because of their "inability to bear a prolonged mental and physical strain."

—*CHAI WOODHAM*

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Eve

The nation's storied wetland is the focus of the world's largest environmental restoration project. But will that be enough?

BY MICHAEL GRUNWALD
PHOTOGRAPHS BY CARLTON WARD JR.

Smithsonian
MARCH 2006 VOLUME 36, NUMBER 12

erglades

ON DECEMBER 11, 2000, the Supreme Court heard oral arguments in George W. Bush, et al. v. Albert Gore, Jr., et al. The deadlocked presidential election had exposed a polarized nation, and pundits were describing Governor Bush's "Red America" and Vice President Gore's "Blue America" as if they were separate countries at war.

But at the White House that day, a cease-fire was in effect. In the heat of the partisan fight over the Florida recount, President Bill Clinton was signing a bipartisan $7.8 billion bill to revive the Florida Everglades, the largest environmental restoration effort in history. And a former Miami developer named Jeb Bush, who happened to be Florida's governor as well as the Republican nominee's brother, was standing by the Democratic president's side.

If Florida's political swamp was tearing Americans apart, Florida's actual swamp was bringing them together. "We're here to talk about something that's going to be long-lasting, way past counting votes," Jeb Bush said after the Oval Office ceremony. "This is the restoration of a treasure for our country."

Today, just about everyone agrees that the Everglades is a national treasure. It's a World Heritage Site, an International Biosphere Reserve, the most famous wetland on earth. It's a cultural icon, featured in Carl Hiaasen novels, *Spider-man* comics, country songs and the opening credits of "CSI: Miami," as well as the popular postcards of its shovel-faced alligators and spindly legged wading birds. It's the ecological equivalent of motherhood and apple pie; when a presidential aide on NBC-TV's "The West Wing" was asked the most popular thing the president could do for the environment, he replied, "Save the Everglades."

But there was once an equally broad national consensus that the Everglades was a worthless morass, an enemy of civilization, an obstacle to progress. An 1848 government report deemed it "suitable only for the haunt of noxious vermin, or the resort of pestilential reptiles." Explorers described it as a muddy, mushy, inhospitable expanse of razor-edged saw grass in shallow water—too wet to farm, too dry to sail, too unpredictable to settle. Americans believed it was their duty and destiny to drain this "God-forsaken" swamp, to "reclaim" it from mosquitoes and rattlesnakes, to "improve" it into a subtropical paradise of bountiful crops and booming communities. "Draining the swamp" came to mean solving a festering problem, and converting wetlands into productive lands was considered the essence of conservation. Hadn't God instructed man to subdue the earth and take dominion over all the living creatures that moveth upon it?

In the Everglades, man would learn the limits of that dominion. He would recognize the cost of his abuses against nature, and he would finally begin to try to make amends.

THE NATURAL EVERGLADES was not quite land and not quite water, but a soggy confusion of the two.

It was a vast sheet of shallow water spread across a seemingly infinite saw grass prairie, a liquid expanse of muted greens and browns. It had the panoramic sweep of a desert, except flooded, or a tundra, except melted, or a wheat field, except wild. It was studded with green teardrop-shaped islands of tangled trees and scraggly shrubs, and specked with white spider lilies and violet-blue pickerelweeds. But mostly it looked like the world's largest and grassiest puddle, or the flattest and wettest meadow, or the widest and slowest-moving stream. It had the squish and the scruff of an untended yard after a downpour, except that this yard happened to be larger than the state of Connecticut.

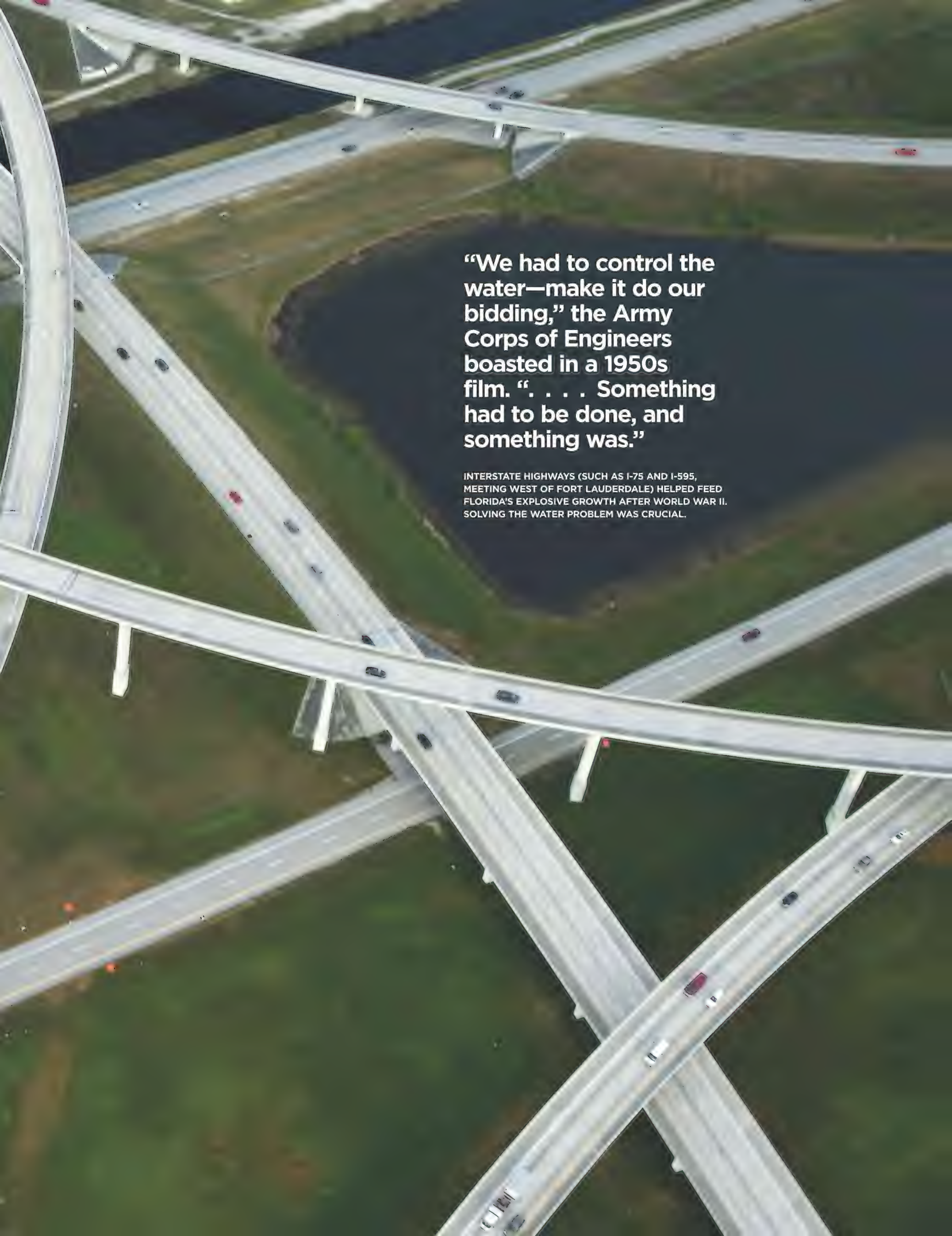
The Everglades seeped all the way down Florida's thumb, from the giant wellspring of Lake Okeechobee in the center of the peninsula to the ragged mangrove fringes of Florida Bay and the Gulf of Mexico, a sodden savanna more than 100 miles long and 60 miles wide—just grass and water, water and grass, except for the tree islands and wildflowers that dotted the grass, and the lily pads and algal mats that floated on the water. The Seminole Indians, who took refuge there in the 19th century, called it Pa-Hay-Okee, or Grassy Water. The bard of the Everglades, Marjory Stoneman Douglas, later dubbed it the River of Grass.

"This is a country that must be understood," said Zane Grey, the novelist and snook fisherman.

The Everglades was almost perfectly flat—no majestic canyons, rugged cliffs or rolling hills, no glaciers, geysers or craters. Even Everglades National Park's first superintendent admitted that its landscape lacked a certain flair, summarizing its attractions as "lonely distances, intricate and monotonous waterways, birds, sky and water." The Everglades was also an incomparably tough slog. It lacked shade and shelter, high ground and dry ground. Breathing its heavy air felt like sucking on cotton. Wading through its hip-deep muck felt like marching in quicksand. Penetrating its dense thickets of sharp-toothed saw grass felt like bathing in broken glass. And there was something downright spooky about its bellowing alligators, grunting pig frogs and screeching owls—and its eerie silences. "The place looked wild and lonely," a hunter wrote after an 1885 visit. "About three o'clock it seemed to get on Henry's nerves, and we saw that he was crying, he would not tell us why, he was just plain scared."

THE NATURAL EVERGLADES, FIRST VIEWED ONLY AS "THE HAUNT OF NOXIOUS VERMIN," HOSTS AN ASTONISHING VARIETY OF WILDLIFE (CLOCKWISE FROM UPPER LEFT: A SOUTHERN SWAMP LILY, A GREAT BLUE HERON, AN AMERICAN ALLIGATOR AND A GREAT EGRET).

From *The Swamp*, by Michael Grunwald. Copyright © 2006 by Michael Grunwald, published by Simon & Schuster.



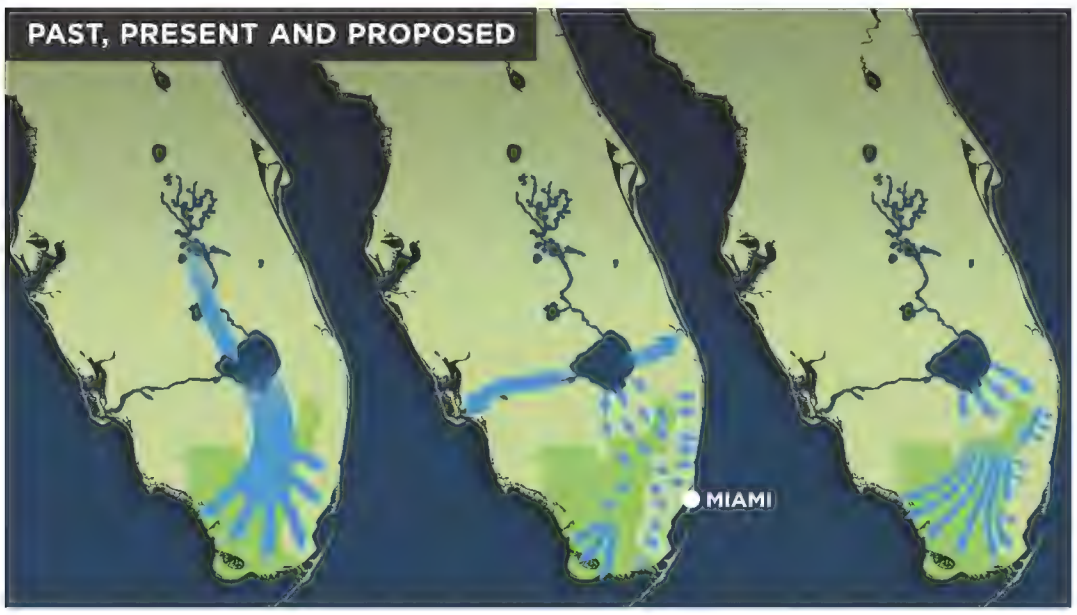
“We had to control the water—make it do our bidding,” the Army Corps of Engineers boasted in a 1950s film. “. . . . Something had to be done, and something was.”

INTERSTATE HIGHWAYS (SUCH AS I-75 AND I-595, MEETING WEST OF FORT LAUDERDALE) HELPED FEED FLORIDA'S EXPLOSIVE GROWTH AFTER WORLD WAR II. SOLVING THE WATER PROBLEM WAS CRUCIAL.

The Everglades also teemed with rats, roaches, snakes, scorpions, spiders, worms, deerflies, sand flies and unfathomably thick clouds of bloodthirsty mosquitoes that flew up nostrils and down throats and into ears.

"My advice is to urge every discontented man to take a trip through the Everglades," an early explorer wrote. "If it doesn't kill him, it will certainly cure him."

BUT THE EVERGLADES was more than a river of grass. The vast saw grass marsh—it is technically a marsh, not a swamp, because its primary vegetation is grassy, not woody—was the most distinctive link in an interconnected ecosystem that blanketed almost all of South Florida, from its headwaters near modern-day Orlando down to the coral reefs off the Florida Keys. This ecosystem was a watery labyrinth of lakes and lagoons, creeks and ponds, pine flatwoods and hardwood hammocks, swamps as well as marshes.



THE ORIGINAL EVERGLADES WATER FLOW (LEFT) WENT FROM THE KISSIMMEE CHAIN OF LAKES DOWN TO THE FLORIDA KEYS BUT WAS FRAGMENTED (CENTER) BY VARIOUS WATER CONTROL PROJECTS. THE RESTORATION PLAN (RIGHT) MAY EVENTUALLY MIMIC THE ORIGINAL FLOW.

Saw grass could be as uninviting to wildlife as it is to people, but the diverse habitats of the broader Everglades ecosystem supported an astonishing variety of life, from black bears to barracudas, turkey vultures to vase sponges, zebra butterflies to fuzzy-wuzzy air plants that looked like hairy psychedelic squid. The Everglades had pterodactyl-like wood storks that snapped their beaks shut in milliseconds, sausage-shaped manatees that devoured 100 pounds of plants a day, four-foot-tall dwarf cypress trees that looked like skeletal bonsai. The Everglades was the only place on earth where alligators (broad snout, fresh water, darker skin) and crocodiles (pointy snout, salt water, toothy grin) lived side by side. It was the only home of the Everglades mink, Okeechobee gourd and Big Cypress fox squirrel. It had carnivorous plants, amphibious birds, oysters that grew on trees, cacti that grew in water, lizards that changed colors and fish that changed genders. It had bottlenose dolphins, marsh rabbits, ghost orchids, moray eels, bald eagles and countless other species that didn't seem to belong on the same continent, much less the same ecosystem.

For all its mystery and monotony, the Everglades did have a few awesome sights. Pioneer naturalist Charles Torrey Simpson was enthralled by 100-foot-tall royal palms with trunks like concrete pillars, standing guard over its sedge and stream. Artist John J. Audubon nearly swooned over the flocks of wading birds that darkened its skies. And the zoologist Louis Agassiz was overwhelmed by the astonishing profusion of life swimming in the estuaries that ringed it.

But the Everglades was less about beauty than about subtlety and originality. It was less ooh or aah than hmm. If the Grand Canyon was a breathtaking painting, the Everglades was a complex drama, and everything in it had a role. The American alligator, the original Everglades engineer, dug muck out of shallow depressions in the marsh during droughts, creating oases for fish and wildlife. The red mangrove, the original Everglades developer, trapped sediments in its spidery roots until they formed new spits of swampland. Cauliflower clouds funneled and blackened into thunderheads that unleashed spectacular torrents of rain. And that clean, fresh shallow water was the lifeblood of the Everglades, fueling its flora and fauna, recharging its aquifers, keeping its wetlands wet.

"A certain kind of lure began to dawn on me," wrote Zane Grey, the bestselling Western adventure novelist who was also a record-breaking South Florida snook fisherman. "This is a country that must be understood."

SOME OF THE FIRST WHITES to wade into the Everglades were U.S. soldiers, and they didn't understand it at all. That's why they failed in their mission to exterminate the Seminole Indians who sought safety in the morass of the marsh. And while some of the explorers did see that the ink-black soil of the Everglades had tremendous agricultural potential, they had no idea how hard it would be to drain. That 1848 government report proclaimed that half a million dollars would be more than enough. The job would ultimately take hundreds of millions.

Gilded Age industrialist Hamilton Disston made the first attempt, digging 80 miles of drainage canals before he ran out of cash. Henry Flagler, who was John D. Rockefeller's right-hand man at Standard Oil before launching a second career building railroads and resorts in Florida, also considered the challenge. Flagler was the visionary force behind Palm Beach, Fort Lauderdale and Miami—as well as a mind-boggling railroad over the ocean to Key West that cost the modern equivalent of half a billion dollars—but he decided he didn't have "the money or the inclination to take up as big a matter as the drainage of the Everglades."

As recently as 1898, five years after the historian Frederick

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MICHAEL GRUNWALD is a reporter for the Washington Post. *CARLTON WARD JR., who photographed the magazine's July 2005 story on elephants in Mali, is an eighth-generation Floridian.*

STEPHEN ROUNTREE

CREATION OF THE EVERGLADES AGRICULTURAL AREA, SOUTH OF LAKE OKEECHOBEE, BENEFITED FLORIDA'S SUGAR GROWERS (ABOVE), BUT FERTILIZER-TAINTED RUNOFF IS CHANGING THE EVERGLADES' VEGETATION. WHILE THE ENDANGERED FLORIDA PANTHER LOSES HABITAT, THE NATIONAL HOCKEY LEAGUE'S FLORIDA PANTHERS PLAY IN AN ARENA (BELOW) BUILT AT THE VERY EDGE OF THE EVERGLADES.

The C&SF project made the upper Glades farmable and the eastern Glades a megalopolis. It turned the central Glades into a vast reservoir.

Jackson Turner declared the Western frontier closed, an explorer marveled that the Everglades was still "as much unknown to the white man as the heart of Africa." But a progressive Florida governor named Napoleon Bonaparte Broward was determined to change that. In 1904, Broward declared war on South Florida's water, vowing to create an Empire of the Everglades with a few canals, shouting, "Water will run downhill!" Drainage, after all, was a hallmark of progress—and of conservation. Florida's leading conservationist, John Gifford, dedicated a book of Everglades essays to the governor, proclaiming Broward's drainage scheme "the greatest conservation project in the United States."

But the Everglades turned out to be a resilient enemy. In dry seasons, Broward's canals shunted precious water out of the Everglades, fueling muck fires that ravaged wildlife. In rainy seasons, the canals were overwhelmed, and Florida swampland became an enduring real estate punch line: "I have bought land by the acre, and I have bought land by the foot," one customer complained, "but by God, I have never before bought land by the gallon." And if it wasn't yet clear that the Everglades was still untamed, a 1928 hurricane blasted Lake Okeechobee through a flimsy dike and killed as many as 2,500 people, most of them poor black farmhands living in Everglades shanties. It is still the second-worst natural disaster in U.S. history, after the Galveston hurricane of 1900—in loss of human life.

After the storm, President-elect Herbert Hoover—an engineer by training—ordered the U.S. Army Corps of Engineers to prevent another disaster. The corps encircled Lake Okeechobee with a massive dike, and the Everglades began to boom, attracting thousands of new settlers and America's largest sugar operation. But in 1947, a summer of downpours followed by two autumn hurricanes dropped an unheard-of 100 inches of rain on South Florida, overwhelming Broward's canals and flooding five million acres for months. "Everglades Is Unconquered Despite Man's Great Fight," the *Miami Herald* declared.

Over the next few decades, the Army Corps finally seized control of the Everglades with the Central and Southern Florida Project for Flood Control and Other Purposes, its largest earth-moving effort since the Panama Canal. The C&SF, as the project was called, built or upgraded more than 2,000 miles of levees and canals, along with hundreds of spillways, floodgates and pumps. "We had to control the water—make it do our bidding," the corps boasted in a 1950s promotional film, *Waters of Destiny*. "Central and Southern Florida just lay there, waiting helplessly to be soaked and dried and burned out again. . . . Something had to be done, and something was."

The C&SF project not only protected lives and property, it also reclaimed land, stored water and promoted economic growth. It turned the Kissimmee Valley into a cattle empire, the upper Glades into an agricultural empire, the eastern Glades into a suburban megalopolis and the central Glades into vast reservoirs that stored water for farms and cities during droughts, absorbed excess water during storms and recharged the region's aquifers.

After World War II, Florida grew at four times the national

As recently as 1898, an explorer marveled that the Everglades was still "as much unknown to the white man as the heart of Africa."

THE MIAMI-FORT LAUDERDALE-WEST PALM BEACH CORRIDOR IS NOW THE NATION'S SIXTH-LARGEST METROPOLIS. BUT SOME NEW COMMUNITIES (SUCH AS WESTON, EST. 1996, WEST OF FORT LAUDERDALE) ARE CROWDING THE DIKE ON THE BORDER OF THE EASTERN EVERGLADES.

rate, and while air conditioning, bug spray, interstate highways and Social Security all played a role in the boom, it couldn't have happened without water control. The Everglades had been America's final frontier, but America's engineers were taming it and improving it. Now, the *Waters of Destiny* narrator intoned, it was "calm . . . peaceful . . . ready to do the bidding of man and his machines. Central and South Florida is no longer nature's fool."

BY THE MID-1990S, Florida was everything its founders had imagined and more—a winter playground, retirement haven, sugar bowl and melting pot. It was home to the citrus and cruise industries, to Little Havana and Little Haiti, to the Professional Golf Association and "The Golden Girls," to Disney World and Gianni Versace. The Naples area not only had America's highest concentration of millionaires, it also had the second-highest growth rate, behind Las Vegas. More than 300 people moved to South Florida every day.

But the region was still nature's fool. The Florida Panthers' hockey arena was built so close to the Everglades that an errant slap shot could almost land in the swamp, neatly illustrating the sprawl that was wiping out the actual Florida panther. The near-collapses of Lake Okeechobee, Florida Bay and coral reefs were pummeling bait shops, motel owners and dive shops. Broward County schools were so crowded that students were lining up for lunch at 9:50 a.m.

As bulldozers plowed deeper into the Everglades, downtowns were dying and suburbanites were idling in traffic; Miami was America's poorest city, and the average South Florida commute doubled in a decade. The Miami-Fort Lauderdale-West Palm Beach metropolitan area was becoming an indistinguishable glob of gated communities, Jiffy Lubes, strip malls, Comfort Inns, RV parks, Taco Bells and cloverleaf interchanges. The regional economy was a kind of ecological Ponzi scheme, dominated by low-wage tourism and construction jobs that relied on the constant pursuit of more people and more development that put more stress on nature. There was agriculture too, but most of the region's farms were basically subdivisions awaiting their zoning variances.

Half the Everglades was gone, drained or paved for agriculture or development. The other half was an ecological mess, yo-yoing between fires and floods, increasingly polluted by the effluvia of civilization. Cattails crowded out Everglades saw grass, and 90 percent of the wading birds disappeared.

In October 1995, all 42 members of the Governor's Commission for a Sustainable South Florida—which included developers, farmers and bankers, as well as environmentalists—agreed that the region was going to hell. "It is easy to see that our present course in South Florida is not sustainable," they warned in a unanimous report.

BUT NOW WETLANDS were no longer considered wastelands, and the Everglades was no longer reviled. It was revered, and Democrats and Republicans competed to save it. The Army Corps of Engineers now compared the Everglades to the Grand Canyon and to Yellowstone National Park. Eventually, Congress ordered the corps to "restudy" the C&SF project. By 2000, an unlikely coalition of developers, environmentalists, agribusinesses, sportsmen and water managers had coalesced around a corps plan to restore the natural flows of the Everglades and save 69 endangered species from extinction.

The 4,000-page document was almost absurdly complex, but its aim was simple: to capture a trillion extra gallons of water that were being shunted out to sea every year and redirect it to farms, cities and the Everglades. It called for 18 above-ground reservoirs covering an area nearly the size of New York City, two below-ground reservoirs retrofitted from limestone quarries in the eastern Everglades and 330 high-tech wells that would inject water a quarter-mile into the earth, to be withdrawn during droughts.

Of course, the plan did not exactly aim to "restore" the Everglades; that would have required the relocation of several million people living west of Interstate 95. The re-engineered Everglades would still be intensely managed and tightly controlled. But the corps predicted that if it could mimic the area's original hydrology, the biology would follow: "The entire South Florida ecosystem, including the Everglades, will become healthy. . . . The numbers of animals—crayfish, minnows, sunfish, frogs, alligators, herons, ibis and otters—at virtually all levels in the aquatic food chain will markedly increase."

"It is easy to see that our present course . . . is not sustainable," a commission warned in 1995.

Scientists at Everglades National Park disagreed. They used the plan's own data to show that it offered swift, sure and lucrative benefits to South Florida's homeowners, developers and agribusinesses, while its benefits for the Everglades were riddled with uncertainties—and delayed for decades. The plan, they wrote to the corps, "does not represent a restoration scenario for the southern, central and northern Everglades." But few politicians were willing to vote against "America's Everglades." The same Congress that had been torn in half by Clinton's impeachment overwhelmingly approved his $7.8 billion plan for the Everglades. The same Florida legislature that would erupt over Bush v. Gore approved the Everglades restoration without a dissenting vote. And on December 11, 2000, President Clinton and Jeb Bush made history. "This is a model—not just for our country, but for projects around the world," Bush said.

HE WAS RIGHT. The Everglades plan is not only America's blueprint for multibillion-dollar restoration projects in the Great Lakes, San Francisco Bay and Louisiana's coastal wetlands; it is also being touted as a global model for ecosystems such as Africa's Okavango Delta and South America's Pantanal.

But while many Americans believe the Everglades has al-

IF THE RESTORATION SUCCEEDS, MORE WATER WILL FLOW THROUGH THE EVERGLADES (PANTHER KEY, ABOVE), BUT THE PLAN RELIES ON UNTESTED TECHNOLOGIES AND GIVES AGRICULTURAL AND RESIDENTIAL WATER USERS PRIORITY OVER THE ECOSYSTEM.

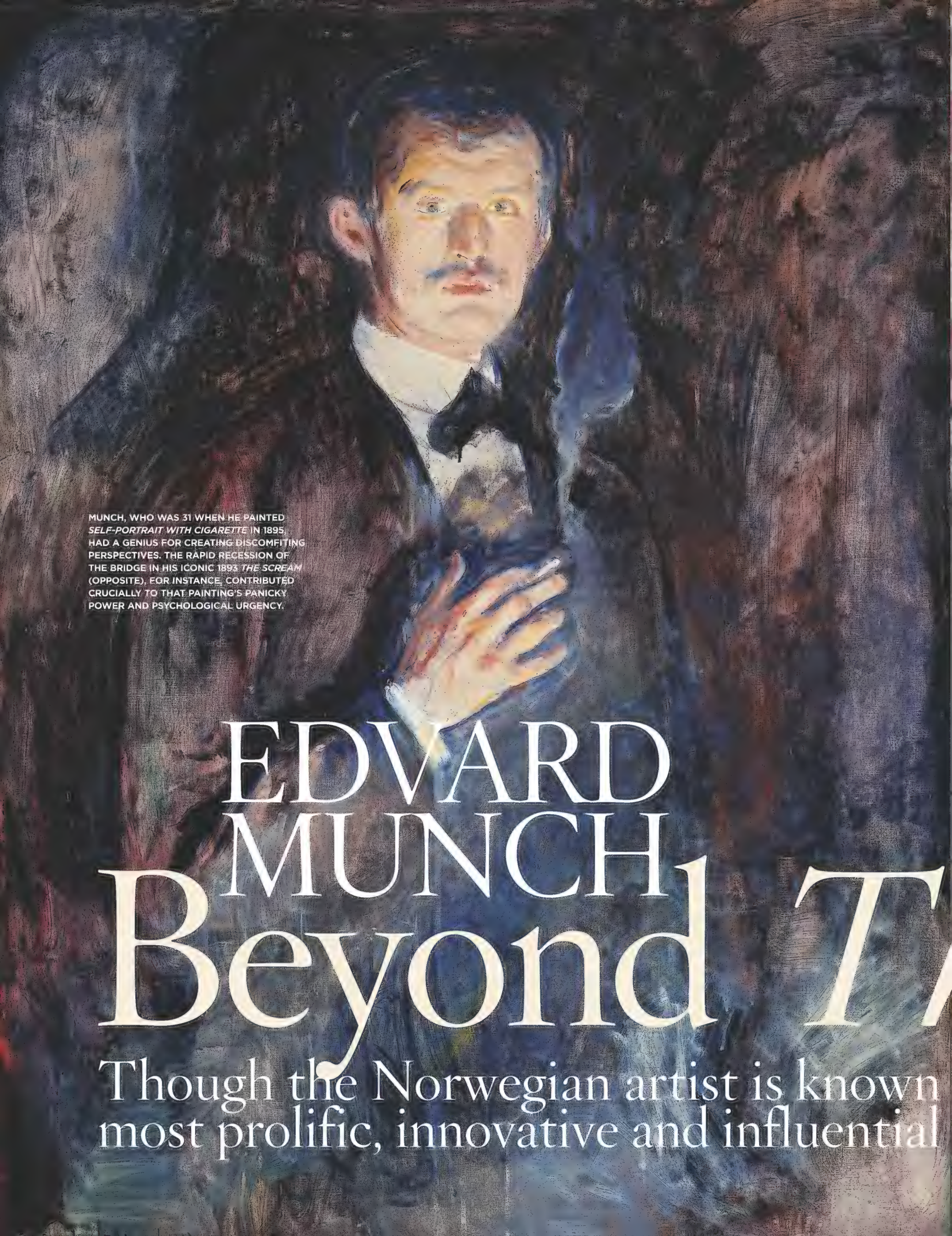
ready been saved, the ecosystem remains in deep trouble, and the restoration project has been no help yet. Gary Hardesty, the Army Corps planner overseeing the project in Washington, warned in a March 2005 internal memo that it was already dramatically over budget, behind schedule and off track: "It's different from what we told Congress we would do—and it's not restoration!!!" The corps has yet to build the pilot projects that were supposed to test the plan's uncertain technologies. And in an era of federal budget deficits, the outlook for an initiative now priced at $10.5 billion is increasingly gloomy.

The environmental outlook is worse. In 2004, after four hurricanes churned up 50,000 tons of nutrients in Lake Okeechobee, scientists warned that the lake was becoming a dead zone, and water managers began flushing even more of its dirty waters into fragile estuaries. The result has been a massive increase in toxic "red tides" in the St. Lucie and Caloosahatchee rivers, along with dramatic die-offs of manatees, dolphins and oysters. Meanwhile, invasive species have proliferated throughout the ecosystem, from a seaweed that suffocates coral to a fern that has spread like kudzu. An invasive 13-foot Burmese python recently illustrated the problem in gruesome allegorical form by devouring a native 6-foot gator in Everglades National Park, only to die itself of a ruptured stomach. And as President Clinton mused after signing the Everglades bill, "If we don't do something about climate change, your Everglades is going to be underwater."

But the most daunting threat to the Everglades is still development. The Miami-Fort Lauderdale-West Palm Beach corridor has become America's sixth-largest metropolis, sprawling into the Everglades. A recent Brookings Institution study declared the region the ultimate "edgeless city," and developers still press west. One possible destination is the 700,000-acre Everglades Agricultural Area below Lake Okeechobee. It is now dominated by the sugar industry, but new bedroom communities would be even more destructive.

At the same time, southwest Florida is sprawling east into the Everglades. "Haven't we learned our lessons?" the EPA's South Florida director e-mailed the top Army Corps regulator in Florida in 2002. "Apparently not." And the Everglades plan is designed to enable South Florida's growth addiction, not cure it, doubling the region's population to more than 12 million by 2050. One little-noticed provision will launch a $12 million study of future restoration in southwest Florida. So while the corps spends billions to repair the damage of the past, it is preparing to spend more to repair the damage of the future.

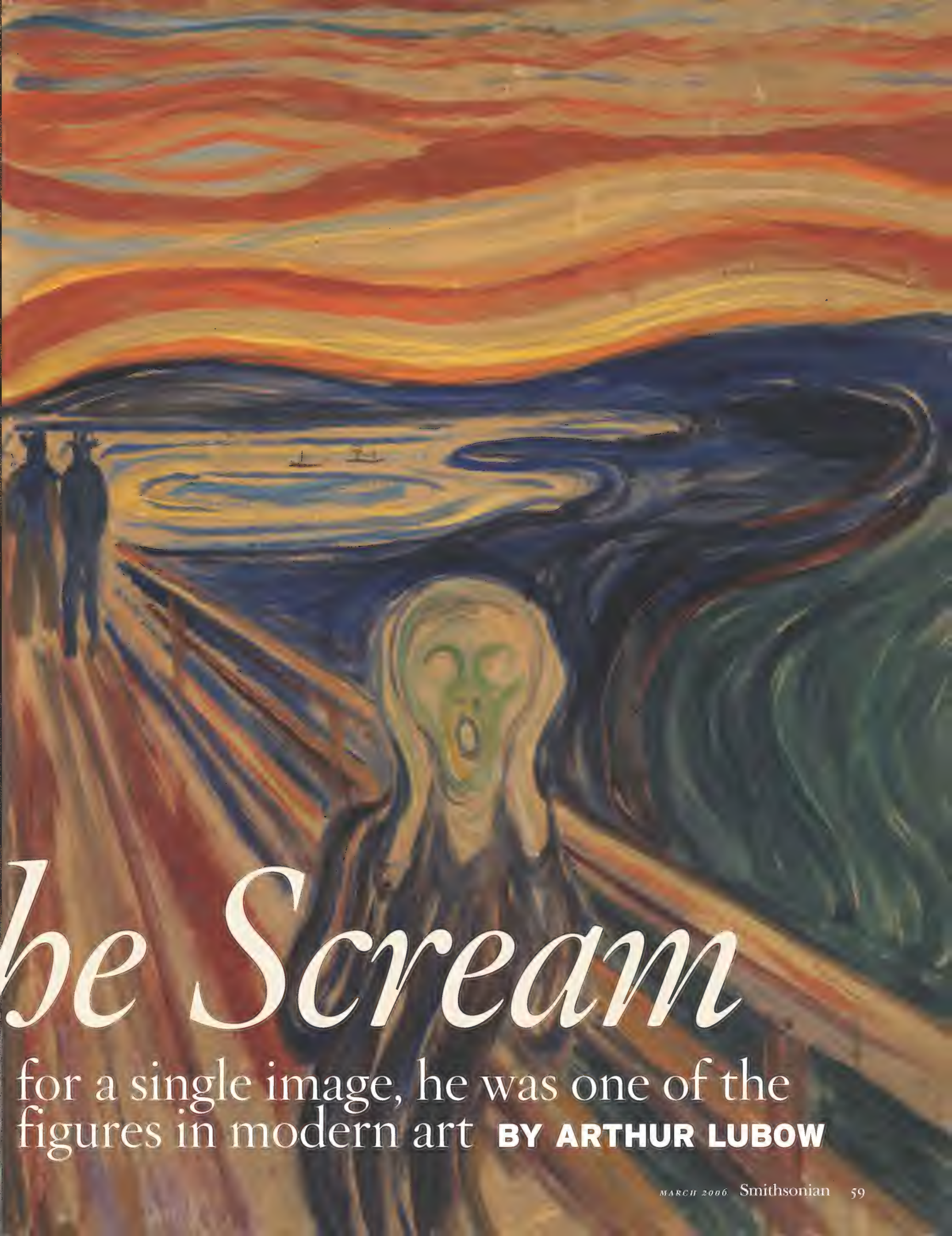
"The Everglades is a test," Marjory Stoneman Douglas used to say. "If we pass, we may get to keep the planet." If we can't pass the test in Florida—with the resources of a rich state and a rich country, with abundant rainfall, with the world's most beloved wetland—it's hard to imagine where we can.



MUNCH, WHO WAS 31 WHEN HE PAINTED *SELF-PORTRAIT WITH CIGARETTE* IN 1895, HAD A GENIUS FOR CREATING DISCOMFITING PERSPECTIVES. THE RAPID RECESSION OF THE BRIDGE IN HIS ICONIC 1893 *THE SCREAM* (OPPOSITE), FOR INSTANCE, CONTRIBUTED CRUCIALLY TO THAT PAINTING'S PANICKY POWER AND PSYCHOLOGICAL URGENCY.

EDVARD MUNCH Beyond *Th*

Though the Norwegian artist is known
most prolific, innovative and influential



The Scream

for a single image, he was one of the figures in modern art

BY ARTHUR LUBOW

EDVARD MUNCH, who never married, called his paintings his children and hated to be separated from them. Living alone on his estate outside Oslo for the last 27 years of his life, increasingly revered and increasingly isolated, he surrounded himself with work that dated to the start of his long career. Upon his death in 1944, at the age of 80, the authorities discovered—behind locked doors on the second floor of his house—a collection of 1,008 paintings, 4,443 drawings and 15,391 prints, as well as woodcuts, etchings, lithographs, lithographic stones, woodcut blocks, copperplates and photographs. Yet in a final irony of his difficult life, Munch is famous today as the creator of a single image, which has obscured his overall achievement as a pioneering and influential painter and printmaker.

Munch's *The Scream* is an icon of modern art, a *Mona Lisa* for our time. As Leonardo da Vinci evoked a Renaissance ideal of serenity and self-control, Munch defined how we see our own age—wracked with anxiety and uncertainty. His painting of a sexless, twisted, fetal-faced creature, with mouth and eyes open wide in a shriek of horror, re-created a vision that had seized him as he walked one evening in his youth with two friends at sunset. As he later described it, the "air turned to blood" and the "faces of my comrades became a garish yellow-white." Vibrating in his ears he heard "a huge endless scream course through nature." He made two oil paintings, two pastels and numerous prints of the image; the two paintings belong to Oslo's National Gallery and to the Munch Museum, also in Oslo. Both have been stolen in recent years, and the Munch Museum's is still missing. The thefts have only added posthumous misfortune and notoriety to a life filled with both, and the added attention to the purloined image has further distorted the artist's reputation.

With the aim of correcting the balance, a major retrospective of Munch's work, the first to be held in an American museum in almost 30 years, opened last month at the Museum of Modern Art in New York City. "Everybody knows, but everybody doesn't know Munch," says Kynaston McShine, the MoMA curator-at-large who organized the exhibition. "They all have the idea that they know Munch, but they really don't."

The Munch who materializes in this show is a restless innovator whose personal tragedies, sicknesses and failures fed his creative work. "My fear of life is necessary to me, as is my illness," he once wrote. "Without anxiety and illness, I am a ship without a rudder. . . . My sufferings are part of my self and my art. They are indistinguishable from me, and their destruction would destroy my art." Munch believed that a painter mustn't merely transcribe external reality but should record the impact a remembered scene had on his own sensibility. As demonstrated in a recent exhibition of self-portraits at the Moderna Museet in Stockholm and the Royal Academy of Arts in London, much of Munch's work can be seen as self-portraiture. Even for an artist, he was exceptionally narcissistic. "Munch's work is like a visual autobiography," McShine observes.

Although he began his artistic career as a student of Norwegian painter Christian Krohg, who advocated the realistic depiction of contemporary life known as Naturalism, Munch developed a psychologically charged and expressive style to transmit emotional sensation. Indeed, by the time he raised his brush to the easel, he typically no longer paid attention to his model. "I do not paint what I see, but what I saw," he once explained. Influenced as a young man by his exposure in Paris to the work of Gauguin and van Gogh, who both rejected the academic conventions of the official Salon, he progressed toward simplified forms and blocks of intense color with the avowed purpose of conveying strong feelings.

"ILLNESS AND MADNESS AND DEATH WERE THE BLACK ANGELS THAT STOOD AT MY CRADLE," MUNCH WROTE. HIS MOTHER DIED WHEN HE WAS 5, AND HIS BELOVED OLDER SISTER, SOPHIE (BELOW, AS DEPICTED IN HIS 1885-86 *THE SICK CHILD*), DIED NINE YEARS LATER AT 15, ALSO OF TUBERCULOSIS.

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AS SOPHIE WAS DYING, SHE ASKED TO BE TAKEN OUT OF BED AND PUT IN A CHAIR. MUNCH'S 1893 *DEATH IN THE SICK ROOM* (ABOVE) CAPTURES THE EMOTION OF THAT SCENE. "IT'S NOT THE CHAIR THAT SHOULD BE PAINTED," MUNCH ONCE WROTE, "BUT WHAT A PERSON HAS FELT AT THE SIGHT OF IT."

In early 1890, in a huff, Munch quit the class of an esteemed Parisian painting teacher who had criticized him for portraying a rosy brick wall in the green shades that appeared to him in a retinal afterimage. In ways that antagonized the contemporary art critics, who accused him of exhibiting "a discarded half-rubbed-out sketch" and mocked his "random blobs of color," he would incorporate into his paintings graffiti-like scrawls, or thin his paint and let it drip freely.

The radical simplicity of his woodcut technique, in which he often used only one brilliant color and exposed the grain of the wood on the print, can still seem startlingly new. For the woodcuts, he developed his own method, incising the image with rough broad strokes and cutting the finished woodblocks into sections that he inked separately. His printmaking style, as well as the bold composition and color palette of his paintings, would deeply influence the German Expressionists of the early 20th century, including Ernst Ludwig Kirchner and August Macke. Characteristically, though, Munch shunned the role of mentor. He preferred to stand apart.

"He wanted to be regarded as a contemporary artist, not an old master," says Gerd Woll, senior curator at the Munch Museum. He embraced chance fearlessly. Visitors to his studio were shocked when they saw that he had left his paintings out of doors in all kinds of weather. "From the first years, the criticism of Munch was that he didn't finish his paint-

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"My fear of life is necessary to me, as is my illness," Munch once wrote. "My sufferings are part of my self and my art. They are indistinguishable from me, and their destruction would destroy my art."

ings, they were sketches and starts," Woll says. "This was true, if you compare them to paintings in the Salon. But he wanted them to look unfinished. He wanted them to be raw and rough, and not smooth and shiny." It was emotion he wanted to depict. "It's not the chair that should be painted," he once wrote, "but what a person has felt at the sight of it."

ONE OF MUNCH'S earliest memories was of his mother, confined with tuberculosis, gazing wistfully from her chair at the fields that stretched outside the window of their house in Kristiania (now Oslo). She died in 1868, leaving Edvard, who was 5, his three sisters and younger brother in the care of her much older husband, Christian, a doctor imbued with a religiosity that often darkened into gloomy fanaticism. Edvard's aunt Karen came to live with the family, but the boy's deepest affection resided with Sophie, his older sister. Her death nine years later at age 15, also of tuberculosis, lacerated him for life. Dying, she asked to be lifted out of bed and placed in a chair; Munch, who painted many compositions of her illness and last days, kept that chair until his death. (Today it is owned by the Munch Museum.)

Compounding Edvard's misery was his own fragile health. As Sue Prideaux recounts in her new biography, *Edvard Munch: Behind The Scream*, he had tuberculosis and spit blood as a boy. His father's expressed preference for the next world (an alarming trait in a physician) only amplified the son's sense of death's imminence. One of Munch's finest self-portraits, a lithograph of 1895, depicts his head and clerical-looking collar materializing out of a black background; a thin white band at the top of the work contains his name and the year, and a corresponding strip below features a skeletal arm. "I inherited two of mankind's most frightful enemies—the heritage of consumption and insanity—illness and madness and death were the black angels that stood at my cradle," he wrote in an undated private journal. In a never-ending saga of woe, one of Edvard's sisters spent most of her life institutionalized for mental illness, and his one brother, who had seemed atypically robust for a Munch, died suddenly of pneumonia at 30. Only his youngest sister, Inger, who like him never married, survived into old age.

Edvard's precocious talent was recognized early. How quickly his art (and his personality) evolved can be seen from two self-portraits. A small, three-quarters profile on cardboard, painted in 1881-82 when he was only 18 (left, top), depicts the artist's classic good looks—straight nose, cupid's-bow mouth, strong chin—with a fine brush and academic correctness. Five years later, Munch's palette-knife work in a larger self-portrait (left, bottom) is impressionistic and splotchy. His hair and throat blur into the background; his lowered gaze and outthrust chin lend him an insolent air; and the red rims of his eyes suggest boozy, sleepless nights, the start of a long descent into alcoholism.

For a full-length portrait in 1889 of Hans Jaeger, the nihilist at the heart of the bohemian crowd in Kristiania with whom Munch increasingly fraternized, the artist posed the notorious writer in a slouch on a sofa with a glass tumbler on the table in front of him and a hat low on his forehead. Jaeger's head is aslant and his eyes jut forward in a pose both arrogant and dissolute. Along with psychological astuteness, the compelling portrait demonstrates Munch's awareness of recent developments in painting. The dappled blue-and-gray brushwork of Jaeger's coat suggests Impressionism, especially the work of Cézanne, which the Norwegian may have seen on trips to Paris in 1885 and 1889.

For Christian Munch, who was struggling to pay the expenses of his son's education, Edvard's association with dubi-

THE EVOLUTION OF MUNCH'S STYLE IS EVIDENT IN TWO SELF-PORTRAITS PAINTED ONLY FIVE YEARS APART. HIS SELF-PORTRAIT OF 1881-82 (RIGHT, TOP), DONE WHEN HE WAS JUST 18, WAS EXECUTED IN A FORMAL, ACADEMIC STYLE. HIS 1886 SELF-PORTRAIT (RIGHT), IN CONTRAST, IS MUCH LOOSER AND MORE IMPRESSIONISTIC.

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"I FELT OUR LOVE LYING ON THE GROUND LIKE A HEAP OF ASHES," MUNCH WROTE OF HIS RELATIONSHIP WITH MILLIE THAULOW. PART OF HIS *FRIEZE OF LIFE*, THE ARTIST'S 1894 PAINTING *ASHES* (ABOVE) WAS ORIGINALLY TITLED *AFTER THE FALL* AND REFLECTS HIS ANGUISH ABOUT THE AFFAIR.

ous companions was a source of anguish. Edvard, too, was torn. Though he lacked his father's faith in God, he had nonetheless inherited his sense of guilt. Reflecting later on his bohemian friends and their embrace of free love, he wrote: "God—and everything was overthrown—everyone raging in a wild, deranged dance of life. . . . But I could not set myself free from my fear of life and thoughts of eternal life."

His first sexual experience apparently took place in the summer of 1885, when he was 21, with Millie Thaulow, the wife of a distant cousin. They would meet in the woods near the charming fishing village of Aasgaardstrand. He was maddened and thrilled while the relationship lasted and tormented and desolate when Millie ended it after two years. The theme of a forlorn man and a dominating woman fascinated Munch. In one of his most celebrated images, *Vampire* (1893-94), a red-haired woman can be seen sinking her mouth into the neck of a disconsolate-looking lover, her tresses streaming over him like poisonous tendrils. In another major painting, his 1894 *Ashes* (above), a woman reminiscent of Millie confronts the viewer, her white dress unbuttoned to reveal a red slip, her hands raised to the sides of her head while a distraught lover holds his head in despair.

MUNCH WAS IN PARIS in November 1889 when a friend delivered a letter to him. Verifying that it contained bad news, he bid the friend farewell and went alone to a nearby restaurant, deserted except for a couple of waiters, where he read that his father had died of a stroke. Although their relation-

ship had been fraught—"He didn't understand my needs; I didn't understand the things he prized most highly," Munch once observed—the death unhinged him. Now head of a financially pressed family, he was sobered by the responsibility and gripped by remorse that he had not been with his father when he died. Because of this absence, he could not release his feelings of grief into a painting of the death scene, as he had done when his mother and his sister Sophie died. *Night in Saint Cloud* (painted in 1890), a moody, blue interior of his suburban Paris apartment, captures his state of mind. In it, a shadowy figure in a top hat—his roommate, Danish poet Emanuel Goldstein—stares out a window at the bright lights on the Seine River. Evening light, streaming through a mullioned window, casts a symbolic pattern of a cross onto the floor, evoking the spirit of his devout father.

Following his father's death, Munch embarked on the most productive—if most troubled—stage of his life. Dividing his time between Paris and Berlin, he undertook a series of paintings that he called *The Frieze of Life*. He produced 22 works as part of the series for a 1902 exhibition of the frieze in Berlin. Suggestive of his state of mind, the paintings bore such titles as *Melancholy*, *Jealousy*, *Despair*, *Anxiety*, *Death in the Sickroom* and *The Scream*, which he painted in 1893. His style varies dramatically during this period, depending on the emotion he was trying to communicate in a particular painting. He turned to an Art Nouveau sultriness for *Madonna* (1894-95) and a stylized, psychologically laden Symbolism for *Summer Night's Dream* (1893). In his superb *Self-portrait with Cigarette* of 1895, painted while he was feverishly engaged with *The Frieze of Life*, he employed the flickering brushwork of Whistler, scraping and rubbing at the suit jacket so that his body appears as evanescent as the smoke that trails from the cigarette he holds smoldering near his heart. In *Death in the Sickroom*, a moving evocation of Sophie's death painted in 1893, he adopted the bold graphic outlines of van Gogh, Gauguin and Toulouse-Lautrec. In it, he and his sisters loom in the foreground, while his aunt and praying father attend to the dying girl, who is obscured by her chair. Across the vast space that divides the living siblings (portrayed as adults) from their dying sister, the viewer's eye is drawn to the vacated bed and useless medicines in the rear.

The frieze won wide approval in Berlin, and Munch was suddenly collectible. "From the combination of crude Nordic delight in color, the influence of Manet, and a penchant for reverie, something quite special springs," one critic wrote. "It's like a fairytale," Munch rejoiced in a letter to his aunt. But despite his pleasure in his overdue success, Munch remained far from happy. Some of the strongest paintings in the series were those he had completed the most recently, chronicling a love affair that induced the misery he often said he required for his art.

In 1898, on a visit to Kristiania, Munch had met the woman who would become his cruel muse. Tulla Larsen was the wealthy daughter of Kristiania's leading wine merchant, and at 29, she was still unmarried. Munch's biographers have

relied on his sometimes conflicting and far from disinterested accounts to reconstruct the tormented relationship. He first set eyes on Larsen when she arrived at his studio in the company of an artist with whom he shared the space. From the outset, she pursued him aggressively. In his telling, their affair began almost against his will. He fled—to Berlin, then on a yearlong dash across Europe. She followed. He would refuse to see her, then succumb. He memorialized their relationship in *The Dance of Life* of 1899-1900 (above), set on midsummer's night in Aasgaardstrand, the seaside village where he once trysted with Millie Thaulow and where, in 1897, he had purchased a tiny cottage. At the center of the picture, a vacant-eyed male character, representing Munch himself, dances with a woman in a red dress (probably Millie). Their eyes do not meet, and their stiff bodies maintain an unhappy distance. To the left, Larsen can be seen, golden-

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THE DANCE OF LIFE (1899-1900) WAS THE LAST PRINCIPAL MOTIF MUNCH PAINTED FOR *THE FRIEZE OF LIFE*. THE PAINTING PORTRAYS THE COMPLEX AND CONFLICTED RELATIONSHIPS THE ARTIST (CENTER) HAD WITH WOMEN. TULLA LARSEN APPEARS AT FAR LEFT AND FAR RIGHT; MILLIE IS IN RED.

haired and smiling benevolently, in a white dress; on the right, she appears again, this time frowning in a black dress, her countenance as dark as the garment she wears, her eyes downcast in bleak disappointment. On a green lawn, other couples dance lustfully in what Munch had called that "deranged dance of life"—a dance he dared not join.

Larsen longed for Munch to marry her. His Aasgaardstrand cottage, which is now a house museum, contains the antique wedding chest, made for a bride's trousseau, that she gave him. Though he wrote that the touch of her "narrow, clammy lips" felt like the kiss of a corpse, he yielded to her imprecations and even went so far as to make a grudging proposal. "In my misery I think you would at least be happier if we were married," he wrote to her. Then, when she came to Germany to present him with the necessary papers, he lost them. She insisted that they travel to Nice, as France did not require these documents. Once there, he escaped over the border to Italy and eventually to Berlin in 1902 to stage *The Frieze of Life* exhibition.

That summer, Munch returned to his cottage in Aasgaardstrand. He sought peace, but drinking heavily and brawling publicly, he failed to find it. Then after more than a year's absence, Larsen reappeared. He ignored her overtures, until her friends informed him that she was in a suicidal depression and taking large doses of morphine. He reluctantly agreed to see her. There was a quarrel, and somehow—the full story is unknown—he shot himself with a revolver, losing part of a finger on his left hand and also inflicting on himself a less obvious psychological injury. Prone to exaggerated feel-

ings of persecution—in his painting *Golgotha* of 1900, for instance, he depicted himself nailed to a cross—Munch magnified the fiasco in his mind, until it assumed an epic scale. Describing himself in the third person, he wrote, "Everybody stared at him, at his deformed hand. He noticed that those he shared a table with were disgusted by the sight of his monstrosity." His anger intensified when Larsen, a short time later, married another artist. "I had sacrificed myself needlessly for a whore," he wrote.

In the next few years, his drinking, which had long been excessive, grew uncontrollable. "The rages were coming more and more often now," he wrote in his journal. "The drink was meant to calm them, especially in the morning but as the day wore on I became nervy, angry." Anguished as he was, he still managed to produce some of his finest work, including a tableau (executed in several versions) in which he uses himself as the model for the slain French revolutionary Marat, and Larsen is cast as Marat's assassin, the grim, implacable Charlotte Corday. His 1906 *Self-portrait with a Bottle of Wine* (below), in which he paints himself alone at a restaurant table, with only a plate, a wine bottle and a glass, testifies to intense disquiet. Two waiters stand behind him in the almost empty restaurant, evoking the setting in which he had read of his father's death.

In the fall of 1908, Munch collapsed in Copenhagen. Hearing hallucinatory voices and suffering paralysis on his left side, he was persuaded by his old roommate from the Saint-Cloud apartment, Emanuel Goldstein, to check himself into a private sanitarium on the outskirts of the city. There he reduced his drinking and regained some mental stability. In May, he departed, vigorous and eager to get back to his easel. Almost half of his life remained. Yet most art historians would agree that the great preponderance of his best work was created before 1909. His late years would be less tumultuous, but at a price of personal isolation. Reflecting this view, MoMA devotes less than a fifth of the show to his post-1909 output. "In his later years," explains curator McShine, "there are not as many poignant paintings as there were when he was involved with life."

MUNCH'S 1906 *SELF-PORTRAIT WITH A BOTTLE OF WINE* (LEFT) CONVEYS A FEELING OF MELANCHOLY AND LONELINESS. "THE SECOND HALF OF MY LIFE HAS BEEN A BATTLE JUST TO KEEP MYSELF UPRIGHT," WROTE THE ARTIST (ABOVE AT EKELY, NEAR OSLO, IN 1943, THE YEAR BEFORE HE DIED).

In 1909, Munch returned to Norway, where he began work on an important series of murals for the assembly hall at Oslo University. Still in place, the *Aula Decorations*, as the murals are known, signaled Munch's new determination to look on the bright side, in this case quite literally, with a centerpiece of a dazzling sun. In newly independent Norway, Munch was hailed as the national artist, much as the then recently deceased Henrik Ibsen and Edvard Grieg served, respectively, as national writer and composer. Along with his new fame came wealth, but not serenity. Maintaining his distance from an alternately adoring and scornful public, Munch withdrew to Ekely, an 11-acre estate on the outskirts

ART RESOURCE, NY / MUNCH MUSEUM / ARTISTS RIGHTS SOCIETY, NEW YORK

RAGNVALD VAERING / MUNCH MUSEUM PHOTO ARCHIVE

of Oslo that he purchased in 1916 for a sum equivalent to the price of two or three of his paintings. He sometimes defended his isolation as necessary to produce his work. At other times, he implied it was needed to maintain his sanity. "The second half of my life has been a battle just to keep myself upright," he wrote in the early 1920s.

At Ekely, Munch took up landscape painting, depicting the countryside and farm life around him, at first with joyous color, later in bleaker tones. He also returned to favorite images, producing new renditions of some of *The Frieze of Life* paintings. In his later years, Munch supported his surviving family members financially and communicated with them by mail, but chose not to visit them. He spent much of his time in solitude, documenting the afflictions and indignities of his advancing years. When he was stricken with a nearly fatal influenza in the great pandemic of 1918-19, he recorded his gaunt, bearded figure in a series of self-portraits as soon as he could pick up a brush. In 1930, after a blood vessel burst in his right eye and impaired his vision, he painted, in such works as *Self-portrait During the Eye Disease*, the clot as it appeared to him—a large, irregular purple sphere. Sometimes he gave the sphere a head and sharp beak, like a demonic bird of prey. Eventually, it flew off; his vision returned to normal.

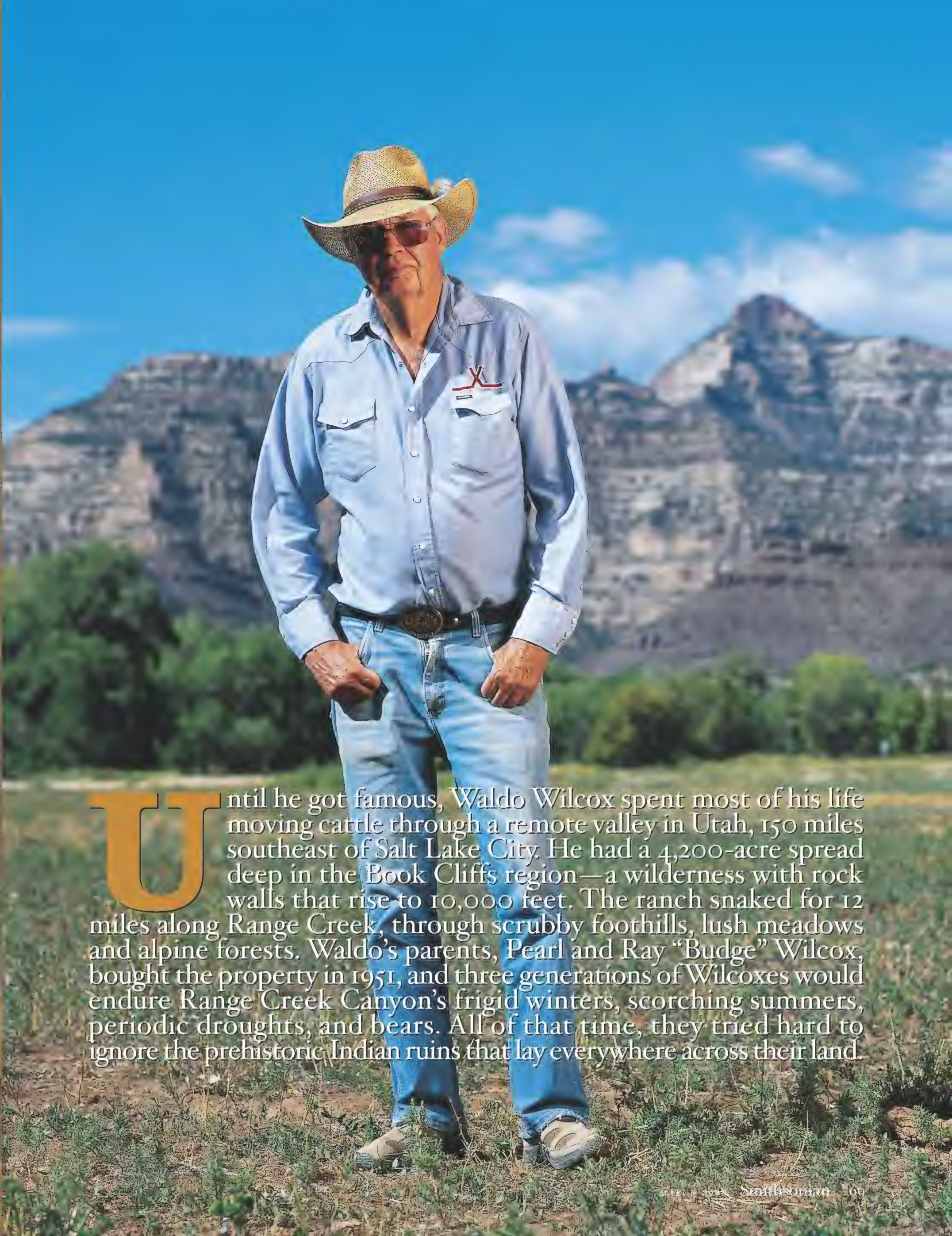
In *Self-portrait Between the Clock and the Bed*, which dates from 1940-42, not long before Munch's death, we can see what had become of the man who, as he wrote, hung back from "the dance of life." Looking stiff and physically awkward, he stands wedged between a grandfather clock and a bed, as if apologizing for taking up so much space. On a wall behind him, his "children" are arrayed, one above the other. Like a devoted parent, he sacrificed everything for them.

SECRETS OF THE RANGE CREEK RANCH

ARCHAEOLOGISTS CHEERED when Waldo Wilcox's vast spread was deeded to the State of Utah, believing that it holds keys to a tribe that flourished 1,000 years ago—and then mysteriously vanished

BY KEITH KLOOR PHOTOGRAPHS BY DOUGLAS MERRIAM

RED OCHER ON ROCK (A CENTURIES-OLD PICTOGRAPH, ABOVE) IS ONE OF THE MANY CRYPTIC SIGNS AND ARTIFACTS LEFT BEHIND BY MYSTERIOUS EARLY AMERICANS WHOSE LEGACY RANCHER WALDO WILCOX (OPPOSITE) QUIETLY OVERSAW.



Until he got famous, Waldo Wilcox spent most of his life moving cattle through a remote valley in Utah, 150 miles southeast of Salt Lake City. He had a 4,200-acre spread deep in the Book Cliffs region—a wilderness with rock walls that rise to 10,000 feet. The ranch snaked for 12 miles along Range Creek, through scrubby foothills, lush meadows and alpine forests. Waldo's parents, Pearl and Ray "Budge" Wilcox, bought the property in 1951, and three generations of Wilcoxes would endure Range Creek Canyon's frigid winters, scorching summers, periodic droughts, and bears. All of that time, they tried hard to ignore the prehistoric Indian ruins that lay everywhere across their land.

It couldn't have been easy. Pit houses dug halfway in the ground, their roofs caved in, dotted the valley floor and surrounding hills. Arrowheads, beads, ceramic shards and stone-tool remnants were strewn all over. Human bones poked out of rock overhangs, and hundreds of bizarre human figures with tapered limbs and odd projections emanating from their heads were chiseled on the cliff walls. The family kept mum about this mysterious world. Waldo in particular became a zealous guardian, chasing off curious locals who got wind of all the artifacts.

Then, in 2001, Wilcox, entering his 70s, quietly sold the property for $2.5 million to the nonprofit Trust for Public Land, and then federal and state agencies helped arrange for the land to be deeded to the State of Utah. Archaeologists called in to visit the site were flabbergasted. The ruins were not only extensive but well preserved: the pit houses were intact, no graffiti or bullet holes marred the petroglyphs, and granaries were stuffed with corncobs a thousand years old.

Scientists wasted no time in setting up a research camp. "There are few places left in the continental U.S. where the sites haven't been picked over and vandalized to a great extent," says Kevin Jones, the state archaeologist for Utah. The researchers soon realized they'd lucked into a constellation of 1,000-year-old hamlets that belonged to the enigmatic Fremont people, highly mobile hunters and farmers who lived mostly in Utah from around A.D. 200 to 1300 before disappearing—like the cliff-dwelling Anasazi, their contemporaries farther south.

So far, archaeologists have documented nearly 300 Fremont sites at Range Creek (none of which has been excavated). And they managed to keep a lid on their work until a June 2004 Associated Press story described the archaeological riches and the eccentric landowner who'd guarded the secret for decades. Wilcox became an overnight sensation, portrayed in newspaper stories from Salt Lake City to Sydney, Australia, as a heroic cowboy who'd stood vigil over an amazing time capsule. "It's like being the first white man in there, the way I kept it," Wilcox boasted to one reporter. Archaeologists' comments fueled the place's mystique. Jones was quoted as calling Range Creek a "national treasure" and its discovery akin to "finding a Van Gogh in your grandmother's attic." Another hailed it as "one of the most important archaeological collections in North America."

"We've seen places where people were living in knife-edge ridges, 900 to 1,000 feet above the valley floor." They were "afraid of something."

Part of the excitement rests on hopes that Range Creek may help explain what happened to the Fremont. Along the canyon floor, traces of large villages indicate a flourishing settlement, while pit houses and granaries built high in the cliffs suggest a defensive retreat. "We've seen places where people were living in knife-edge ridges, 900 to 1,000 feet above the valley floor, which means to get a jug of water you'd have to send someone on a big long hike and back up," says Jones. "These people were afraid of something. They were obviously trying to protect their food, and it wasn't from mice."

Research at Range Creek may help explain why farming rather suddenly halted across much of the Southwest seven centuries ago, prompting tribes to abandon their ancestral pueblos. Over the years, experts have suggested that warfare, drought, disease and religious upheaval may have caused the exodus. "The most interesting thing about the Fremont is they adopted farming, did it at varying levels of intensity for 1,100 years, and then quit," says Duncan Metcalfe, curator at the Utah Museum of Natural History, in Salt Lake City, who is conducting research at Range Creek. "If we can figure out why, I think we can understand why other populations, at the time, abandoned agriculture too."

THE WILCOX RANCH lies only 30 miles southeast of Price, Utah, but the journey takes two and a half hours on a rutted logging road that curves up 4,000 feet along sheer cliffs before descending into Range Creek. Waldo Wilcox meets me outside the north gate. He now lives in Green River, 50 miles north, with his wife, Julie. But he still has the run of his former property. Clad in bluejeans and a straw cowboy hat, Wilcox shoulders a set of ropes, which he uses to pull himself over large boulders. A stylized or "walking" X, his cattle brand, is emblazoned on his pale-blue shirt, on the side of his pickup truck and on various cliffs. He seems a cross between John Wayne and Archie Bunker, a sometimes ornery anachronism whose speech is peppered with political incorrectnesses. He professes little interest in the former inhabitants. "All I know is I grew up with a bunch of dead Indians, and that's all I want to know," he tells me. "It was their life."

We meet up with Jones, the lead archaeologist, and when I first see this storied site, I'm underwhelmed. The collapsed pit houses—basically, circles of boulders—pale in comparison to the majestic ruins of New Mexico's Chaco Canyon or the grandeur of Colorado's Mesa Verde, with their multistory stone houses nestled into overhanging cliffs. Here most of the granaries—which number in the hundreds and range from cabinet-size to several yards across—are so high in the cliffs they are visible only with binoculars. "Because the ar-

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ARCHAEOLOGISTS (JONES ABOVE RANGE CREEK) MARVEL AT THE CLIFFSIDE GRANARIES THAT THE FREMONT PEOPLE BUILT. CONTAINING CORNCOBS PERHAPS 1,000 YEARS OLD, SOME FOOD STORES ARE SO REMOTE THAT ONLY EXPERIENCED ROCK CLIMBERS HAVE BEEN ABLE TO INSPECT THEM.

chaeology itself isn't spectacular or striking to the average visitor, this won't be a great tourist attraction," Jones says with obvious gratitude.

But the place grows on you. Jones and I follow Wilcox up the steep slopes through patchy groves of pinyon, juniper and sage. Wilcox sets a brisk pace. Several hundred feet above the valley floor, we stop at a natural bench where some 50 slabstone boulders form a ring—the foundations of a pit house. Perhaps a thousand years ago, the pit was dug about two feet into the ground. The builders would have leveled the floor and sunk four juniper or cedar posts into a squarish frame near the center of the pit. They would have fastened another four logs horizontally to the tops of the posts, and then leaned numerous logs against those crosspieces. Branches and brush may have been added to the walls and roof, which would have been covered by a thick layer of earth. The typical house was roughly conical or like a pyramid with a flat top and stood about 12 feet across and 6 feet high. A hole in the roof allowed for access in and out via a ladder and let smoke escape. Near some of the houses, the ground is still black in places from the ash of cooking fires. A lot of pit houses burned before the occupants could clear out their possessions—a boon for archaeologists.

Lying nearby is a large metate, an indented stone that the Fremont used to grind corn and seeds. Jones points to a slight crack in a cliff wall about 20 feet above our heads. "There's a little granary there," he says, peering through his binoculars. "They're all over the place up here. You have to risk your life to get into them." Through my binoculars I can see a square structure wedged into a crack, sealed with mud. It looks virtually impossible to reach, and so far only accomplished climbers working with Range Creek researchers have been able to get into it.

Renee Barlow, an archaeologist at the Utah Museum of Natural History and an experienced rock climber who has inspected granaries, has calculated that some held hundreds of bushels of maize. Filling them, she says, "would mean hundreds of trips climbing with big loaded baskets on your back."

Archaeologists speculate that the Fremont were "scatter hoarding," or hiding their food in multiple places. "You risk losing some of it, but at least if another person gets into it, they've only got one bit," Jones says. As we climb higher, Jones, who is 54 and husky, points out several more adobe granaries, molded into tiny crevices with reddish clay, virtually camouflaged high up on the sandstone cliff. There is evidence the Fremont used crude ladders or made toeholds in the rocks to reach them. Wilcox says he has never tried to reach the cliff granaries.

Wilcox turns his attention to a long, narrow crack in the big wall in front of us. "See that hole with them rocks back in there? I bet you a hundred dollars to ten dollars that you dig down under them rocks you'd find a dead Indian." Jones stiffens. I ask Wilcox how he would know. "Because them rocks are there, on top of the grave. And you'd find him all hunched up like a baby is after it's born."

"Well, we're not going to test your hypothesis by digging into it," Jones says. Nothing makes an archaeologist more jittery than finding human remains on government land. It often triggers a federal review that requires researchers to notify tribes that may claim that the remains are those of an ancestor. Tribal concerns about possible desecration can bring research to a halt. As Wilcox talks on, Jones looks as if he wishes he were on another cliff. But the old rancher is just getting started. "You're not going to find anything of value in a grave. I've seen several of them dug up, and I think these Indians were so damn poor that when they died they went to the happy hunting ground and there was no need to take what little they had."

The human remains issue has flared up before. When the Range Creek story first appeared in the news media, local tribes such as the Northern Ute, who claim affiliation to the Fremont, were angry that archaeologists had kept them in the dark about the site. Since then, researchers and tribal leaders have pretty much settled their differences. Still, Metcalfe reluctantly told me that archaeologists have found five sets of human remains, either on ranch property or nearby. He says the tribes have been notified and the researchers haven't touched the remains, much as they would like to analyze them. And though Wilcox once showed me a set of eroded bones and a skull partially buried about a quarter of a mile from his old homestead, he says he himself never dug up any graves: "My dad told me when I was a kid, 'we own the land, but we don't own them dead Indians.'"

WHO WERE THE FREMONT PEOPLE? EXPERTS (ABOVE, DUNCAN METCALFE AND HIS DOG AT RANGE CREEK) HAVE LITTLE TO GO ON. OPPOSITE, CLOCKWISE FROM TOP LEFT: AN UNFIRED, UNDATED CLAY FIGURINE, POSSIBLY A FERTILITY SYMBOL, FROM THE PILLING COLLECTION; PETROGLYPHS CARVED WITH A BONE OR STONE TOOL; A FLAT BASKET USED FOR ROASTING SEEDS, AND A SHOVEL-SHAPED OBJECT WITH PAINT MARKINGS; FRAGMENTS OF DISTINCTIVE CLAY POTS MAY HAVE BEEN FREMONT-MADE, OR ACQUIRED IN TRADE WITH THE ANASAZI PEOPLE.

P. 72 TOP: FRANCOIS GOHIER (2); BOTTOM: DOUGLAS C. PIZAC / AP / WIDE WORLD PHOTOS (2)

ARCHAEOLOGISTS DON'T LIKE the term "Fremont." But they've been stuck with it since the 1920s, when Noel Morss, an anthropology student at Harvard, documented "distinctive unpainted black or grey pottery," a "unique type of moccasin," "elaborate clay figurines" and "abundant pictographs of distinctive types"

along the banks of the Fremont River in south-central Utah.

Some scholars maintain the Fremont were country cousins of the Anasazi, or "ancestral puebloans"—a term contemporary Native Americans prefer. ("Anasazi" is said to be a Navajo word for "ancient enemy.") Others contend they developed from a distinct desert culture established before the Anasazi. Until recently, researchers had believed that the Fremont simply packed up when the climate turned dry. "The easy answer for a long time has been the 1300 A.D. drought," says Michael Berry, a Bureau of Reclamation archaeologist based in Salt Lake City. But the Fremont had endured similar droughts in the past. In another view, the drought, population pressures and an invasion combined to make life untenable for the Fremont. Utes, a tribe of hunter-gatherers, may have migrated into the area from California around the same time the Fremont were starting to retreat to the cliffs, and the competition for food perhaps turned ugly.

Archaeologists have also theorized that warfare among the Fremont broke out during this period. "You know, if your family is starving to death, if you get corn farming pushed to the limits and you're only getting a quarter of what you need to make it through a Utah winter, then going in and raiding your neighbors is going to seem more and more like a better alternative," Metcalfe says. That Fremont life was treacherous seems obvious even from their rock art. Perhaps the most haunting petroglyph I see at Range Creek is an upside-down figure with a bucket-shaped head and either a tail or penis. It was colored red and etched on the rock at the base of a cliff. It may depict a Fremont who fell to his death.

About the only thing researchers know for sure is that by around A.D. 1350, all the physical trappings that shouted Fremont—the distinctive sandals, baskets and pottery—disappear from the archaeological record. It's possible the Fremont people just moved on. Scientists have recently uncovered potential evidence of Fremont hearths and dwellings, dating from around 1500, along a tributary of the Green River in northwestern Colorado, 75 miles north of Range Creek. Barlow and others wonder if the culture shifted from farming back to full-time hunter-gathering. "When you become a hunter-gatherer again, you don't stay in one place long," says Metcalfe. "You'll change your look to an archaeologist. The material culture will be very different, but it might be exactly the same people."

The Wilcoxes "certainly did make an effort to preserve the place," says historian Steve Gerber. "That's not to say they didn't take anything."

LIKE THE STORY of the Fremont, the story of Range Creek is complicated. For starters, the canyon is not entirely pristine. Fur trappers arrived in the late 1800s, and cattle ranching began then too. One rancher, Clarence Pilling, found 11 clay figurines made by the Fremont. He later donated some of them to the College of Eastern Utah Prehistoric Museum in nearby Price, where they are now on display as the "Pilling figurines."

The Wilcoxes themselves have also done some collecting over the years. "Oh, if I seen an arrowhead, I picked it up. I won't lie to you or anyone else," Waldo Wilcox says. "I don't have very many. But I do have half a dozen or so." Wilcox's niece, Jeanie Jensen, says that members of the family often picked up artifacts. In 1999, Ellen Sue Turner, an archaeologist from Texas, visited the ranch, and Wilcox's wife, Julie, showed her a number of artifacts, including Fremont sandals, a wide-mouth jar, arrow points and a grinding stone. (Turner writes about her visit at www.staa.org/fremont/index.html.) Steve Gerber, the official historian for the Range Creek archaeological research project, whose father owned a ranch adjacent to the property, says the Wilcoxes "certainly did make an effort to preserve the place," adding: "That's not to say they didn't take anything or that people before them didn't take anything. The value to scientists is that they didn't go digging potholes."

"I have been on many sites that I am confident have not been walked in on in 1,000 years," says Renee Barlow. "A lot of the sites we have recorded, the artifacts are still right where they were dropped." There are so many artifacts that less than 10 percent of the ranch has been surveyed since work began in 2002. Jerry Spangler, a Utah archaeologist working at Range Creek, says: "Waldo has forgotten more sites than any of us will step on in a lifetime."

Meanwhile, the Wilcox legend continues to grow, and he continues to win awards and accolades for his Range Creek stewardship. It's less widely known that, although Wilcox sold the property, he retains the rights to exploit any subsurface mineral or energy deposits, including oil and natural gas. He says he hasn't ruled out leasing access to the deposits to natural gas developers. That prospect horrifies some of the archaeologists.

Wilcox and I were driving back through the old ranch when we passed two hikers. They were about a mile from the gate, where their car was parked, so Wilcox pulled over to give them a ride. When the middle-aged tourists saw Wilcox, they were as giddy as a couple of teenagers meeting their favorite rock star. "You're a hero," one gushed. Wilcox shrugged and allowed himself a little smile.

WHY DID THE FREMONT PEOPLE DISAPPEAR AROUND A.D. 1300? NEWLY ACCESSIBLE EVIDENCE AT RANGE CREEK (OPPOSITE, A DWELLING THAT MAY HAVE BEEN A SEASONAL RESIDENCE FOR FREMONT FARMERS CULTIVATING THE FLOOD PLAIN) MAY HELP UNRAVEL THE MYSTERY.

{Destination EUROPE Budapest}

Continental

AT THE NEARLY century-old Gellert Hotel, site of a venerable spa on the west bank of the Danube, a dip into a steaming mineral bath makes a fitting start for soaking up the spirit of Budapest, Hungary's beguiling capital. The Gellert's cavernous, Art Nouveau spa first opened its doors in 1918, the year Hungary became an independent nation, after the Austro-Hungarian Empire was dissolved in the wake of World War I. The sulfurous, spring-fed baths under barrel-vaulted ceilings hark back to an ancient tradition: the Romans were first drawn to this Central European plain around A.D. 50 by the prospect of curative waters. They also hint at the city's multilayered past. Turquoise tiles and ornately carved columns evoke the Turkish Ottoman occupation (1541-1686), and Baroque-style cherubs on the walls are a salute to Austrian Hapsburg rule (1686-1918).

Hungarian, the language spoken by my fellow bathers—business executives, politicians and pensioners—is rooted in a linguistic strain introduced around A.D. 900 by Magyar nomads from western Siberia. It shares similarities with only Finnish and Estonian and has long functioned as something of a bulwark against foreign domination. "It was very important in maintaining our national identity," says Andras Gero, the preeminent historian of Budapest. "Turks, Austrians, Germans and, more recently, Russians never could learn Hungarian."

From the Royal Palace, begun in the 1200s and later rebuilt in styles ranging from medieval to Baroque, to the 1859 onion-domed Great Synagogue in the former Jewish quarter at the heart of the city to the

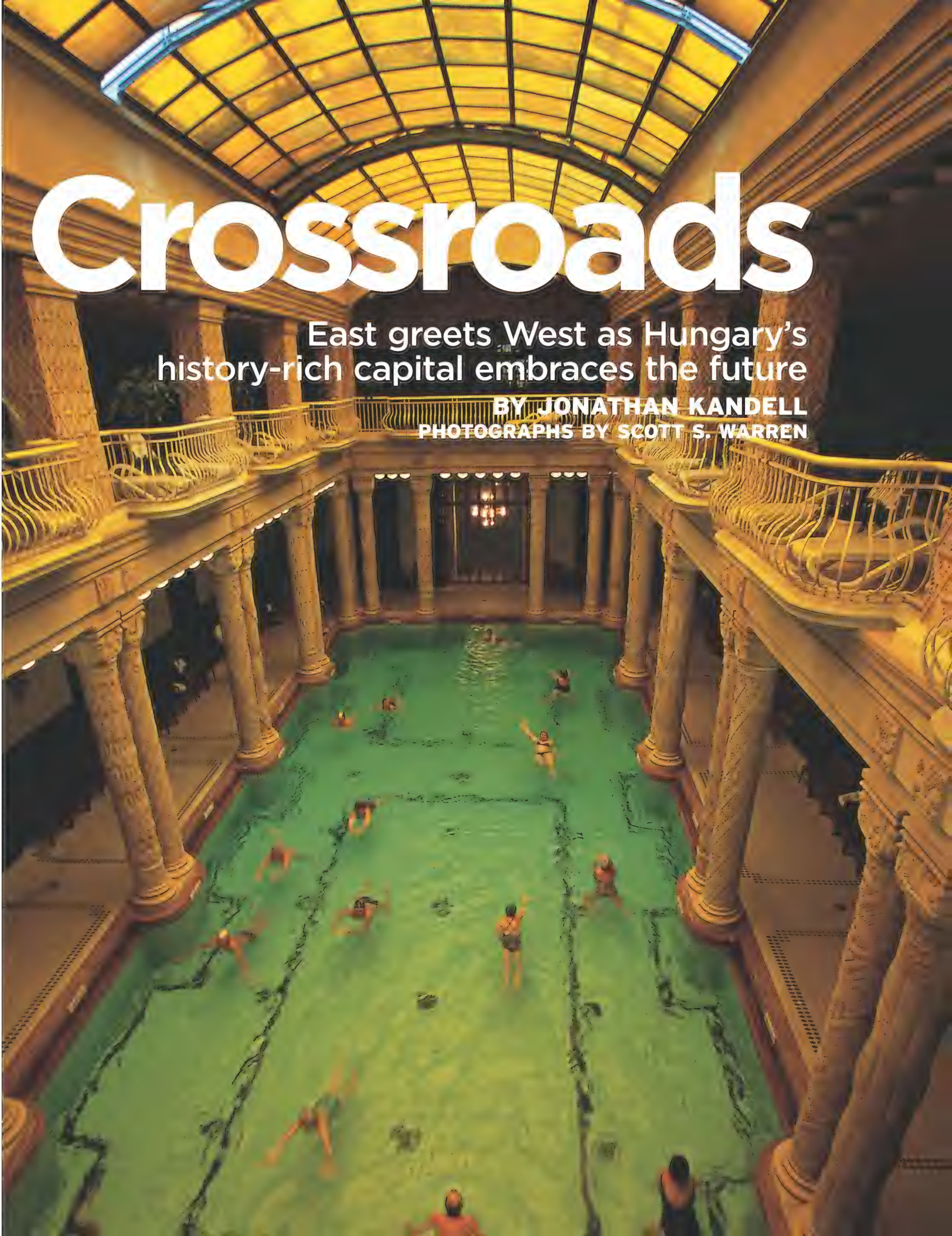
THE 800-YEAR-OLD CITY'S DIVERSIONS (CAFÉ CENTRAL COFFEEHOUSE, LEFT, AND HOTEL GELLERT'S SPA, RIGHT) REFLECT A VIBRANT CULTURE. "THE CITY HAS ENDURED MANY FOREIGN OCCUPATIONS," SAYS HISTORIAN ANDRAS GERO. "THEY HAVE ALL LEFT THEIR MARKS."

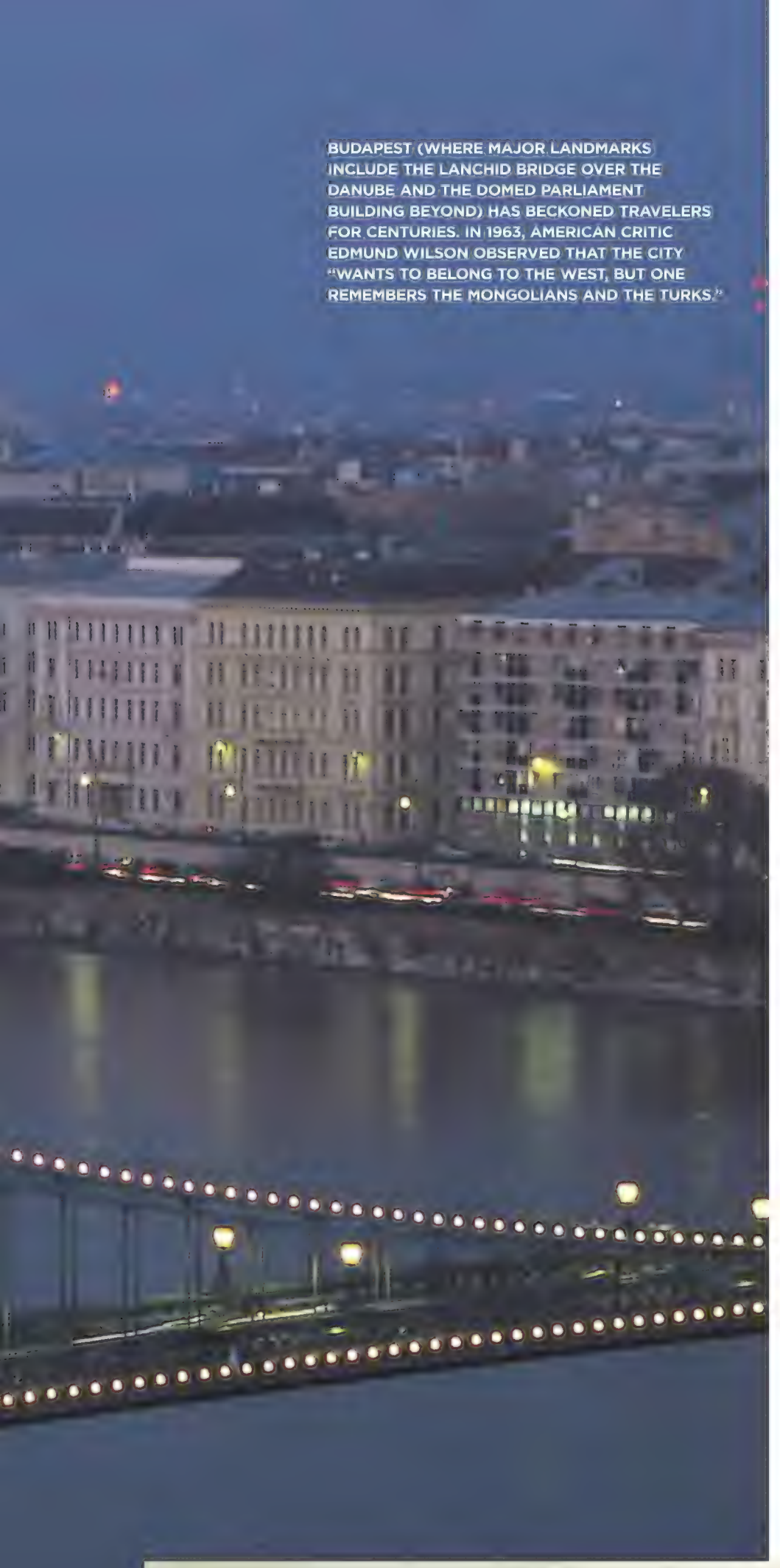
Crossroads

East greets West as Hungary's history-rich capital embraces the future

BY JONATHAN KANDELL

PHOTOGRAPHS BY SCOTT S. WARREN





BUDAPEST (WHERE MAJOR LANDMARKS INCLUDE THE LANCHID BRIDGE OVER THE DANUBE AND THE DOMED PARLIAMENT BUILDING BEYOND) HAS BECKONED TRAVELERS FOR CENTURIES. IN 1963, AMERICAN CRITIC EDMUND WILSON OBSERVED THAT THE CITY "WANTS TO BELONG TO THE WEST, BUT ONE REMEMBERS THE MONGOLIANS AND THE TURKS."

IN 1818, ENGLISH ADVENTURER E. D. CLARKE SAID HE WAS "SURPRISED BY THE [CITY'S] MAGNIFICENCE" (C. 1850).

neo-Gothic 1905 Parliament, Budapest's eclectic architecture and narrow, winding streets may recall Old Europe. But the dynamism is definitely New Europe. Since Communism's fall in 1989, the pace of change on either side of the Danube—Buda on the west and Pest on the east—has been extraordinary. The city of two million is now rich with risk-taking and democracy, and the most prominent figures in politics, business and the arts seem to be uniformly young, ambitious and impatient.

"Under Communism, somebody was always managing your life, and it was quite easy to become passive," says Zsolt Hernadi. As chairman of the oil and gas conglomerate MOL, Hernadi, 45, has presided over the metamorphosis of this formerly state-owned behemoth into the country's largest private corporation. He has fired a great many employees, including 80 percent of the firm's 50 most senior managers. "Age isn't my criterion," he insists, "but frankly, I find that people who are in their 30s and 40s are more willing to move in new directions."

The new spirit is mirrored in the physical transformation of Budapest itself. City historian Andras Torok, 51, published his now-classic *Budapest: A Critical Guide* in 1989. "My ambition was to reveal everything about Budapest," he tells me. But no sooner had his guidebook appeared than readers began pointing out omissions—the renovated lobby of an old building, a restored statue, a new row of shops. Since then, Torok has had to update the guide five times.

At the same time, old traditions are being revived. In the early 20th century, the city boasted more than 800 coffeehouses. "Intellectuals couldn't [afford] to entertain or even keep warm in their own apartments," says Torok, but for the price of a cup of coffee, they could spend the better part of a cold winter day in a café, discussing lyric poet Endre Ady (1877-1919) or satirical novelist Kalman Mikszath (1847-1910), or debating the politics of Count Mihaly Karolyi (1875-1955), the nationalist who formed modern Hungary's first government in 1918, and of Bela Kun (1886-1936), the leftist revolutionary who toppled it a year later. During the Communist era (1945-89), coffeehouses, which were deemed likely to attract dissenters, virtually disappeared. But in recent years, a handful of lavish, nostalgic cafés, re-created in early 1900s style, have opened, though they tend to be expensive. The handsome Café Central is located on Karolyi Street (named after the statesman) in a downtown university quarter. The Central, with its marble-top tables, ornate brass chandeliers, unpolished wood floors and white-aproned waiters, replicates a pre-World War I café.

Then there are the so-called *romkocsma*, or "ruined pubs," located in abandoned

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JONATHAN KANDELL writes frequently for SMITHSONIAN. Photographer SCOTT S. WARREN is based in Colorado.

buildings scheduled to be torn down or renovated, which capture the avant-garde energy of the old coffeehouses better than the reproductions. Among the trendiest, Kuplung (Car Clutch) is housed in a space that was once an auto repair garage in the old Jewish quarter. The shabby-chic décor features discarded chairs and tables and old pinball machines on a cracked concrete floor; motley lanterns hang overhead. Patrons down beer and cheap wine diluted with mineral water to the raucous beat of heavy metal and rock 'n' roll.

But it's classical music that really moves Hungarians. This nation of only ten million has assembled an awesome roll call of classical musicians—composers Franz Liszt and Bela Bartok, conductors Eugene Ormandy and Georg Solti, pianists Zoltan Kocsis and Andras Schiff. Hungarian string players, too, are world famous for their distinctive, velvety tone. "It is genetically impossible for a Hungarian musician to make an ugly violin sound," says Rico Saccani, the 53-year-old native of Tucson, Arizona, who conducts the Budapest Philharmonic Orchestra (BPO).

At a three-hour rehearsal, Saccani greets the 70 musicians with a rousing *Buon giorno*! Swirling a tiny baton, he barks—"More staccato!" "Stronger crescendo!"—as he leads them through bombastic passages of Rossini's 1823 opera, *Semiramide*, as well as works by Schumann, Grieg and Tchaikovsky. I ask Saccani how the orchestra has changed since Communist days. "In those times," he says, "because of generous state subsidies, many more operas and concerts were performed, and ticket prices were so low that attendance was huge." Since 1989, when government financing began to dry up, there have been fewer performances, and many seats are occupied by foreign tourists who can afford the higher ticket prices. The average monthly salary for a BPO musician is only about $700, before taxes.

The next day, one of those musicians, trombonist Robert Lugosi, 27, meets me at the nearby Liszt Academy, Hungary's premier music conservatory. As we wander the halls, muffled sounds of various instruments escape from the closed doors of small practice rooms. Lugosi shows me the school's 1,200-seat, Art Nouveau auditorium, reputed to possess the finest acoustics of any concert hall in Hungary. We pause in the place Lugosi describes as "for me, the most important in the building"—the front lobby stairwell where he met his future wife, Vera, who was a piano student at the time.

TOROK, the guidebook author, speaks of Budapest as a layered city. "If you penetrate Budapest one way, it is a hectic,

GUIDEBOOK AUTHOR ANDRAS TOROK (RIDING CROSSTOWN BUS 15) DOCUMENTS THE CITY'S CULTURAL OFFERINGS (CLASSICAL TROMBONIST ROBERT LUGOSI PERFORMS, ABOVE) AND DISTINCTIVE NEIGHBORHOODS. SAYS TOROK: "MY AMBITION WAS TO REVEAL EVERYTHING ABOUT BUDAPEST."

P. 79 AKG IMAGES

cosmopolitan place with wonderful museums, office buildings and shops," he says. "But approach it from a different axis and it becomes more humble and slower paced." On his advice, I board Bus 15 and spend 40 minutes crossing the city from south to north. The first half of the journey takes me past well-known landmarks: the massive Parliament building on Kossuth Square, named after the leader of the failed Hungarian independence revolt in 1848-49, and Erzsebet Park, the leafy preserve honoring the Hapsburg queen Elizabeth, admired for her sympathetic attitude toward Hungarian nationalists in the years before World War I.

But during the second half of my trip, the bus passes through far less prosperous neighborhoods. Beauty salons advertise long-outdated hairstyles; young men wielding wrenches tinker with motor scooters. Older women in dowdy clothes stroll by. Suit jackets sag on hangers behind open windows, airing out. Small family-run restaurants advertise home cooking and all-you-can-eat buffets.

"I still love those narrow, cozy streets—that is the city where I grew up," says Imre Kertesz, 76, Hungary's Nobel laureate in literature. We meet in the splendidly restored, marble-floored lobby

SHOPPING DISTRICTS (INCLUDING PEDESTRIAN MALLS) ENLIVEN THE CITY. BUDAPEST, SAYS TOROK, IS A "HECTIC, COSMOPOLITAN PLACE."

Novelist Kertesz: "I still love those narrow, cozy streets."

of the Gresham Palace Hotel, a 1903 masterpiece of Art Nouveau architecture, where Budapest's most famous bridge, the Lanchid, straddles the Danube.

In Kertesz's childhood, more than 200,000 Jews lived in Budapest—one quarter of the city's inhabitants. By the end of Nazi occupation in 1945, more than half of them had been killed, many by Hungarian fascists. Kertesz himself survived both Auschwitz and Buchenwald.

After the war, he became a journalist, until he was fired for his reluctance to lionize the new Communist regime. "I could not take up a career as a novelist, because I would be considered unemployed and sent to a labor camp," he tells me. "Instead, I became a blue-collar laborer—and wrote at night." Still, he chose not to flee Hungary during the chaos of the 1956 uprising against the Communists. The Russian Army crushed the revolt, leaving an estimated 3,000 people dead, imprisoning thousands more and sending 200,000 into exile. "Yes, I could have left," says Kertesz, who was only 27 at the time and had yet to write his first novel. "But I felt I would never become a writer if I had to live in the West, where nobody spoke or read Hungarian."

His novels—the best known are *Fatelessness* (1975) and *Kaddish for an Unborn Child* (1990)—take up themes of prewar Jewish life in Budapest and of the Holocaust. Although acclaimed internationally, his works were virtually ignored in Hungary until he received the Nobel Prize in 2002. The next year, more than 500,000 copies of his books sold in Hungary—or about 1 for every 20 countrymen. "But at the same time, there were many protest letters from Hungarians to the Nobel committee in Sweden," says Kertesz. "Most objections were about my being Jewish."

Kertesz divides his time between Berlin and Budapest. He remains controversial in Hungary, especially among conservatives, who regard an emphasis on Hungary's anti-Semitic past to be unpatriotic. I was surprised, therefore, when our interview was interrupted by former prime minister Viktor Orban, a staunch conservative, who greeted Kertesz warmly and professed admiration for his novels.

Hungary's bitterly polarized politics create the impression that the country is mired in a permanent election campaign. The acrimony is rooted in history. Many conservatives refuse to forgive former Communists and other leftists for their support of the Russians in 1956. Many leftists denounce the right for backing fascism during the 1930s and allying the country with Nazi Germany in World War II.

Orban is only 42. Prime Minister Ferenc Gyurcsany, who

heads a coalition of socialists and centrists, is 45. "There is a very deep gap between the two sides," says Minister of Economy Janos Koka, himself only 33. "One reason is that democracy is very young and we aren't yet used to the new rules of the game." Still, he notes with pride, there has been no bloodshed in the 16 years since Hungary moved from a state-run to a free-market economy and from a Communist Party dictatorship to a multiparty democracy.

After making a fortune as a computer-software entrepreneur, Koka accepted an invitation to join the government and apply his business skills to the state bureaucracy. "Unlike the business world, it is very hard to turn a decision into action," he says. "You need a lot of enthusiasm to break through walls of government bureaucracy."

Hernadi, the oil company chairman, admires Koka's brashness. "When I was as young as Koka, I also thought I could accomplish any task," he tells me. "But now I am 45, and trying to change the way government operates would be too much of a shock for me." Hernadi grew up 30 miles northwest of the capital, on the outskirts of Esztergom, a cathedral town where his father was a veterinarian. Recently, Hernadi bought a choice residential site on a hill facing Esztergom Cathedral. He then informed his wife, who is a Budapest native, that he wanted to retire to his hometown. "She told me, 'No way,'" Hernadi says. "That is how I realized that I had become a Budapester."

ON MY LAST DAY in the city, I attend a traditional Hungarian dinner, prepared by my youngest friend in Budapest, Judit Mako, 28, a press aide in the office of the prime minister. The meal, she told me, would not consist of the beef goulash with heavy, tomato-based sauce that most foreigners associate with Hungarian cooking. We meet to shop early on a Saturday morning at Central Market Hall, overlooking the Danube. The exquisite wrought-iron-and-glass structure, built in 1895, is almost as big as Budapest's main train station.

Mako suggests we first have breakfast at a small bar on the mezzanine. We order *langos*—flat, puffy bread with either garlic or a cheese-and-cream topping. Over strong coffee, we peer down at crowds of shoppers, and I am reminded of a touching vignette in Kertesz's most recent novel, *Liquidation* (2003), which also takes place at Central Market Hall. The main character, known only as B., waits his turn to buy vegetables. His former lover, Sarah, shopping nearby, sees him with his hands clasped behind his back. "She sneaked up behind him and suddenly slipped her hand into B.'s open palm," writes Kertesz. "Instead of turning around

ANDREAS ALTWEIN / EPA / CORBIS

THE WORKS OF NOBEL PRIZE-WINNING NOVELIST IMRE KERTESZ (ABOVE) EVOKE BUDAPEST'S PRE-WAR JEWISH COMMUNITY (THE GREAT SYNAGOGUE DATES FROM 1859). "MY ROOTS RUN DEEP IN BUDAPEST," HE SAYS. "BUT NOW WE ARE ALL EUROPEANS."

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AT THE CENTRAL MARKET, BUILT IN 1895, BUDAPESTERS (MAKO, WEARING SCARF) SHOP FOR ESSENTIAL INGREDIENTS (LIKE TRADITIONAL PEPPERS, OR PAPRIKAS, INSET).

Says Judit Mako: "I wouldn't want to live anyplace else."

(as Sarah had intended), B. had folded the woman's hand tenderly, like an unexpected secret gift, in his warm, bare hand, and Sarah had felt a sudden thrill of passion from that grip. . . . " The love affair resumes.

I follow Mako through the crowded aisles as she selects produce for her wicker shopping basket. At one stand she buys cauliflower, onions, garlic and potatoes; at another, carrots, cucumbers and tomatoes; at a third, kohlrabi, parsnips, turnips and cabbage. Last, but not least, she selects paprikas, the Hungarian peppers that are the essential seasonings of Hungarian cuisine. Mako buys fiery green paprikas and also a sweet, red, powdered variety.

Her three-room apartment, on the eastern outskirts of the city, has a view of the Buda Mountains beyond a green plain and thick forest. When I arrive toward sunset, I encounter a boisterous procession of neighbors—women dressed in traditional, brightly colored skirts and men wearing black suits and hats, singing and dancing as a violinist plays gypsy music. An elderly woman tells me they are celebrating the local grape harvest and offers me sweet, freshly made wine.

Mako takes two hours to prepare dinner. Most of the vegetables and a capon go into a soup. A young-hen stew, colored delicately red by the powdered paprika, is served with homemade noodles. The slivers of green paprika are so pungent that my eyes swell with tears. For dessert, Mako sets out a poppy-seed pudding with vanilla cream and raisins. Lingering over Hungarian cabernet sauvignon and pinot noir, the guests talk politics—the tightly contested recent elections in Germany and the expanding European Union, which Hungary joined in 2004.

One dinner guest, a young German lawyer married to a Budapester, says he has no intention of returning to Germany. Another, a French marketing executive who has spent two months as Mako's houseguest, has become so taken with the city she has decided to learn Hungarian and look for a job here. Mako counts herself lucky to have been born in an era of great opportunity—and to be in Budapest. "I wouldn't want to live anyplace else," she says.

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Bone Voyage

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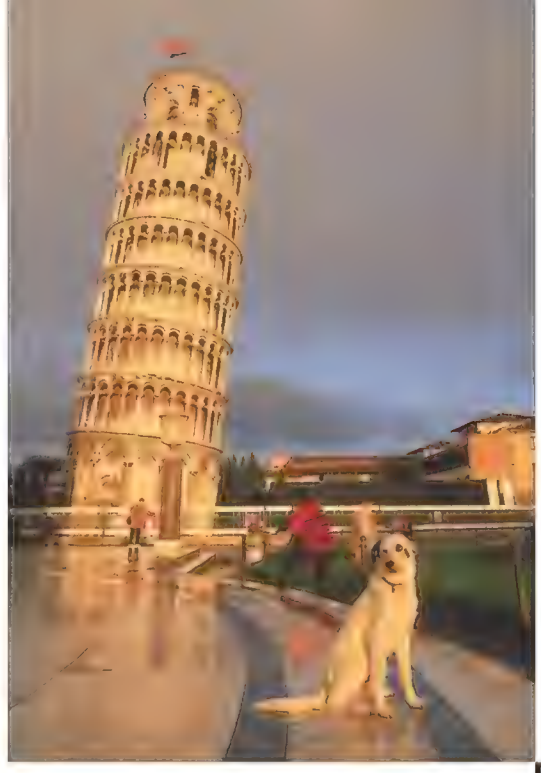
PHOTOGRAPHS BY TONI ANZENBERGER

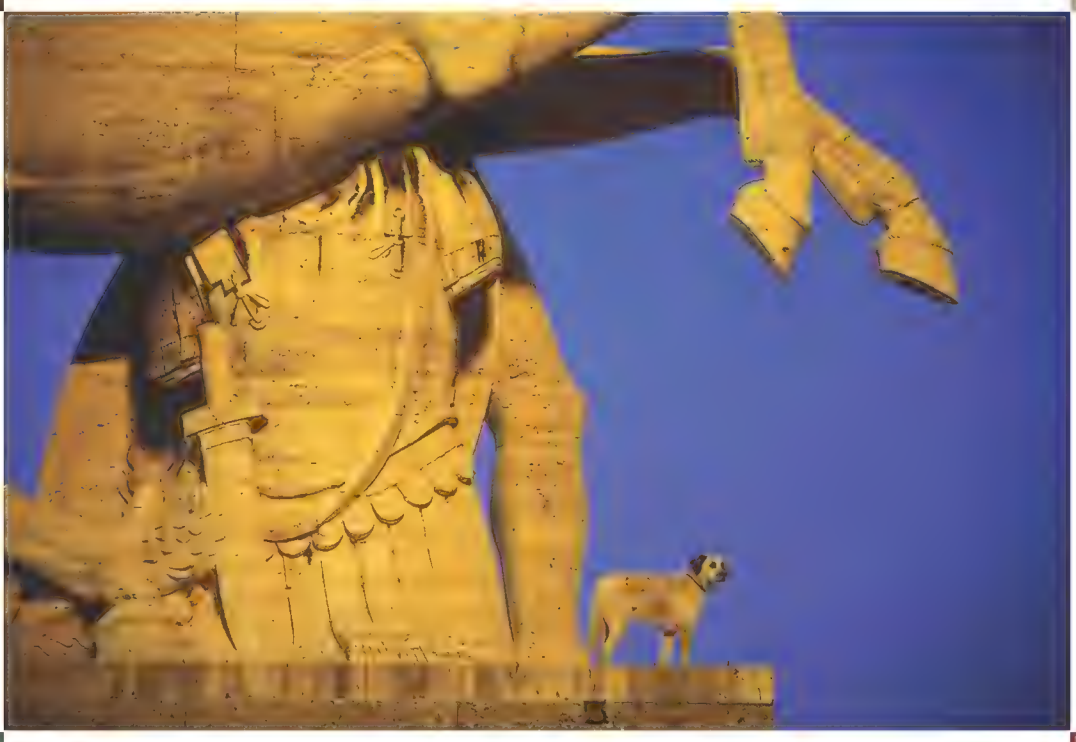
ONE DAY EIGHT YEARS AGO, a young landscape photographer from Vienna was visiting a farm near Verona, Italy, when he learned about a spotted puppy with black ears that no one wanted. The photographer, Toni Anzenberger, adopted the dog and named him Pecorino, thinking it meant "little sheep" in Italian. Only later did Anzenberger learn that he'd named his new best friend after a cheese. "At least Pecorino sounds cute in German, like a clown's name," Anzenberger says. "It's not like calling your dog Gorgonzola."

Then, when Anzenberger brought the dog with him on an assignment in Tuscany, Pecorino kept running into



“At first I thought, Oh, why can’t the dog get out of my picture? And then I thought, Oh, maybe he’ll enliven it.”

—TONI ANZENBERGER



“I JUST HAVE TO BE QUICK AND CATCH HIS MOMENTS OF CURIOSITY,” ANZENBERGER SAYS OF PHOTOGRAPHING PECORINO (OPPOSITE: BELOW, AT A VINEYARD IN TUSCANY, AND ABOVE, IN LIPARI, AEOLIAN ISLANDS). THE ITALIAN-BORN DOG RETURNS FREQUENTLY TO THE HOME COUNTRY. THIS PAGE, CLOCKWISE FROM TOP: SEEING THE SIGHTS IN PISA, ROME, RIMINI, SICILY AND ROME.

"SOMETIMES I DO SHOW HIM HOW TO POSE, BUT OFTEN HE DECIDES FOR HIMSELF," THE PHOTOGRAPHER SAYS OF HIS FOUR-LEGGED SUBJECT. PECORINO DISPLAYS SUPERMODEL FORM IN SANTORINI, GREECE (ABOVE), AND MUNICH (RIGHT AND BELOW).

the picture. At first Anzenberger was frustrated. But he soon realized that Pecorino added character to the pictures. So he began photographing the dog everywhere, on the streets of London and the shores of Greece, next to windmills in the Netherlands and statues in Rome.

Traveling with a canine can be challenging. To enter England and Scandinavia, Anzenberger had to prove that Pecorino didn't carry rabies, which involved waiting several months while the dog underwent blood tests. In Lisbon, Anzenberger caused the subway to be stopped after he and Pecorino boarded a train; security guards enforcing the no-dogs policy escorted the pair aboveground. Most of the time, Anzenberger and Pecorino travel by car; both have a fear of flying.

Pecorino's fame has garnered the duo some unusual privileges. They were allowed to take over two double-decker buses for a shoot in London. The Church of San Michele Arcangelo, in Capri, permitted Anzenberger to photograph Pecorino on its 245-year-old tiled floor, which depicts Adam and Eve's expulsion from Paradise. Most human beings aren't permitted to step on it.

Pecorino has a flare for modeling. The pooch often chooses his own poses, and looks left and right on command, Anzenberger says. Cats or female dogs don't dis-

ALL: TONI ANZENBERGER / ANZENBERGER AGENCY

FOR EUROPE'S BEST-TRAVELED PUP, A DOG'S LIFE DOESN'T LOOK SO BAD AFTER ALL. HE CHECKS OUT THE EIFFEL TOWER IN PARIS (ABOVE); A SCULPTURE BY ROBERT LLIMÓS AT THE OLYMPIC VILLAGE IN BARCELONA (RIGHT); THE CUVILLIÉS THEATRE IN MUNICH, A ROCOCO LANDMARK WHERE MOZART'S OPERA *IDOMENEO* MADE ITS DEBUT IN 1781 (BELOW RIGHT); AND THE DUTCH COUNTRYSIDE IN WINDY KINDERDIJK (BELOW LEFT).

tract him. Once he hears the camera shutter stop clicking, he strikes a new pose. When he has finished his work, he demands to be petted. He prefers being petted even to eating, though he does like fresh bread and spaghetti. And he attracts a crowd. Once, in Barcelona, a bus full of Japanese tourists saw Anzenberger photographing Pecorino on the sidewalk, and they all got out and joined in. Anzenberger himself, who is 36 and lives in Vienna with his wife, also a photographer, is almost never recognized.

A few years ago, a devoted fan in Austria introduced Pecorino to a female pointer mutt that looked a lot like him. They've had eight puppies. Four have a black spot above the eye, like their father, but none has his personality. "The children take after their mother," Anzenberger says. "They are wilder." Anzenberger says Pecorino is happiest at exhibitions of his photographs, where people line up to pet him for hours on end. He knows he's a star. As Anzenberger says, it wasn't his decision to go into canine portraiture—it was Pecorino's.

—*JENNIFER DRAPKIN*

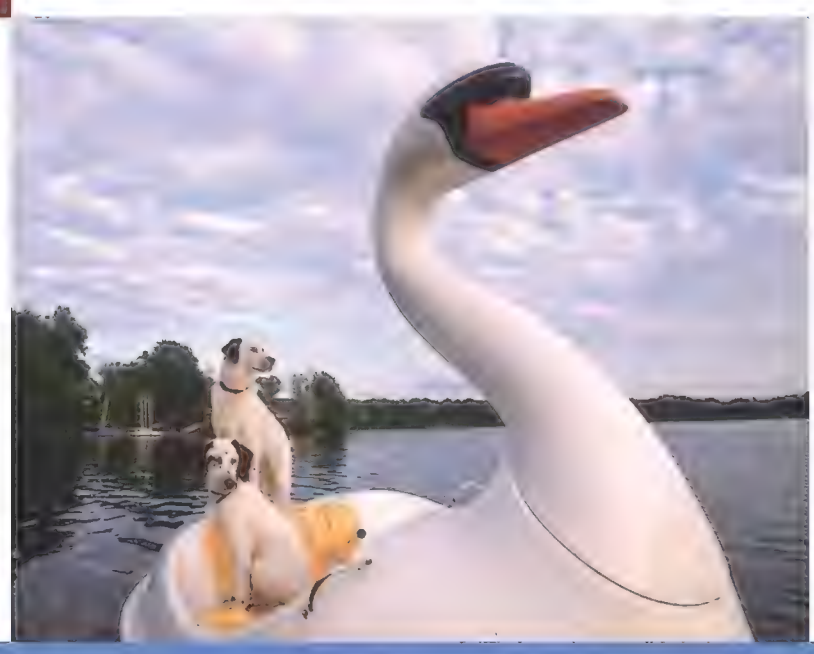
TONI ANZENBERGER's latest book is Pecorino in Styria. *His photographs can be viewed at www.anzenbergergallery.com.*
JENNIFER DRAPKIN is an editorial intern.

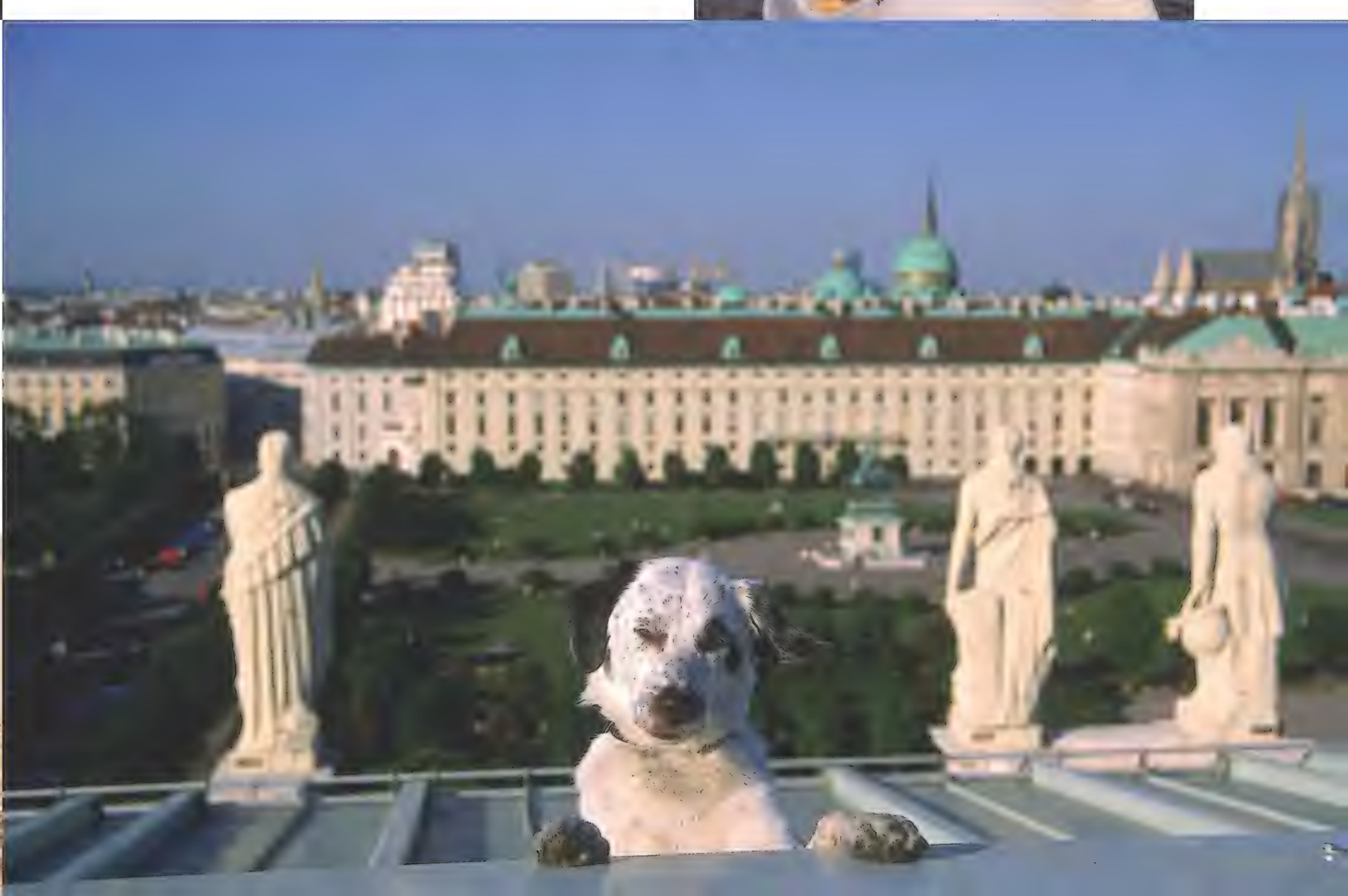
FAME HAS ITS PERKS. PECORINO WAS ABLE TO COMMANDEER A DOUBLE-DECKER BUS IN LONDON (ABOVE) AND RECEIVED PERMISSION TO STEP ON THE TILED FLOOR OF THE CHURCH OF SAN MICHELE ARCANGELO IN CAPRI (LEFT). THE FLOOR, CREATED IN 1761, DEPICTS ADAM AND EVE'S EXPULSION FROM THE GARDEN OF EDEN. PECORINO SUNBATHES IN SANTORINI, GREECE (BELOW).

"It is Pecorino himself who chooses the poses. It's just important for me to find a beautiful spot."

—TONI ANZENBERGER

DEMONSTRATING THE YOGA POSITION KNOWN AS "DOWNWARD DOG," PECORINO WORKS OUT ON A ROOF IN ANDALUSIA, SPAIN (ABOVE). HE VISITS A BAVARIAN LAKE WITH ONE OF HIS EIGHT OFFSPRING, PECORINO II (RIGHT). PECORINO LIVES IN VIENNA (BELOW, THE HOFBURG IN THE BACKGROUND), WHERE THE DOG HAS APPEARED ON TELEVISION AND IN NEWSPAPERS SO OFTEN HE IS RECOGNIZED ON THE STREET. "I'M NOT AN INCREDIBLE DOG LOVER," ANZENBERGER SAYS. "BUT PECORINO IS JUST SO NICE."





Crowning Glory

Sixty years after it was reduced to rubble by Allied bombing, the reconstructed Baroque Frauenkirche, or Church of Our Lady, once again dominates the historic city's skyline **BY ANDREW CURRY**

For centuries, the German city of Dresden was one of Europe's architectural and artistic gems—its "Florence on the Elbe." The Frauenkirche, or Church of Our Lady, a masterpiece of Protestant Baroque design built in the early 18th-century, became the city's most notable landmark. Its distinctive bell-shaped sandstone dome soared 220 feet with no internal supports—an architectural and engineering marvel that has been compared to Michelangelo's Basilica of St. Peter in Rome. But over two days in 1945, American and British bombers wiped out the Frauenkirche and most of Dresden in an unprecedented firestorm. Now, six decades later, the landmark is back in all its glory.

During the five years following Hitler's invasion of Poland, Dresden was mostly spared the bombing that ravaged much of Europe. But on February 13, 1945, nearly 800 British aircraft dropped more than 2,600 tons of bombs on the city. Some 300 American Flying Fortress bombers followed the next morning. Thirteen square miles of the city's historic center were destroyed, and at least 25,000 people were killed. Temperatures reached 1,800 degrees Fahrenheit, and pilots could see the burning city from 100 miles away. The Frauenkirche's dome withstood the explosions. But the firestorm's heat warped the sandstone walls

THE 18TH-CENTURY BAROQUE CHURCH OF OUR LADY (BELOW, LEFT, IN 1945) WAS LEVELED BY ALLIED BOMBING IN FEBRUARY 1945 (BELOW, THE RUINS IN 1947). A 12-YEAR RECONSTRUCTION (OPPOSITE) WAS COMPLETED IN OCTOBER 2005 AT A COST OF NEARLY $160 MILLION.

SAXON STATE LIBRARY DRESDEN / DEUTSCHE FOTOTHEK / WALTER MÖBIUS (2); P. 93 ECKEHARD SCHULZ / AP PHOTO

and pillars. On February 15, a day and a half after the bombing began, the building collapsed. Only the northwest staircase and the choir section remained standing.

Many questioned the decision to target Dresden, a city of more than 600,000 civilians. "The Russians were approaching the Oder, the Americans were on the Rhine," says Dresdener Ewald Kay, a retired engineer who now leads tours of the church. "The war was almost decided." American writer Kurt Vonnegut, a POW in Dresden during the bombing, used the event as the centerpiece of his 1969 antiwar novel, *Slaughterhouse-Five.* After peace returned in the summer of 1945, the East German government left the church's rubble untouched as a reminder of the ravages of war. Since the early 1980s, thousands have gathered annually to light candles amid the stones on the anniversary of the destruction. In recent years, German and British scholars have used newly opened East German archives to paint a more complicated picture of the bombings. Dresden was a fervently loyal Nazi stronghold, a key railroad center and a wartime production hub that imported Jewish and other slave laborers from all over Europe and sent many on to death camps. "Dresden was not an innocent city," says historian Frederick Taylor, author of *Dresden: Tuesday, February 13, 1945.* "Sadly, it was an extremely beautiful one. But large-scale war leaves very little room for morality and romance."

In February 1990, just a few months after the fall of the Berlin Wall, a handful of hopeful Dresdeners kicked off a campaign to raise funds for the restoration of the cathedral with an open letter to the queen of England and the president of the United States. The idea was controversial both for its daunting expense and the ruins' strong symbolism. "People were used to the atmosphere of broken stones and candles," says Frauenkirche administrator Jost Hasselhorn. "There were voices inside and outside the church saying the ruins should remain as a memorial. Nobody could imagine that a reconstructed church would have the same power." Yet the ambitious project captured the public's imagination, both in Germany and abroad. Organizers eventually raised more than $100 million of the $160 million total cost from private donors in 26 countries.

Reconstruction began in 1993 with a painstaking archaeological excavation of the rubble. Thousands of stones were photographed, cataloged and sorted. Whenever possible, the original stones were reused. "Just like a watchmaker knows where each part goes, the stonemasons knew where everything belonged," says guide Ewald Kay. The project took 12 years to complete (only 5 years less than it took to build the original church in the early 1700s) and drew on the expertise of everyone from masons and carpenters to a local painter who carefully re-created the church's ceiling frescoes.

Miraculously, excavators discovered the 1738 altar mostly intact, and the cross that once sat atop the dome was pulled—crushed and twisted, but still recognizable—from beneath tons of rock. Today it stands in the church's nave, and a replacement, donated by British citizens, rises from the dome. Consecrated on October 30, 2005, the Frauenkirche saw 250,000 visitors in the first month and a half it was open.

For tourists accustomed to dark, imposing European cathedrals, the church is especially light and bright; restorers used photographs and paintings to replicate architect George Bähr's white, gold and green color scheme. Built by the city's Protestant citizens, the Frauenkirche was an egalitarian answer to traditional Catholic cathedrals, with the pulpit placed in the center of a round, open room in full view of the congregation. The Baroque altar sculptures and ceiling frescoes glint with gold leaf. Clear glass windows flood the interior with sunlight from almost every direction. The church's long tradition of musical performance—in 1736, Johann Sebastian Bach performed on its organ—has also been revived. Every day at noon, a free organ recital fills the sanctuary with music; evening concerts usually sell out well in advance, packing audiences into the cathedral's four stories of wooden balconies.

In the end, 8,425 original stones were incorporated into the rebuilt church, close to half the total needed for the reconstruction. Weathered nearly black by decades of exposure, they pepper the golden sandstone exterior. To some, they represent the city's scars. "From a theological point of view, the wounds the soul has can be healed," Hasselhorn says. "It's possible to close the city's wounds too. Eventually the stones will all be the same color. Year by year, the wounds can heal."

SOME 8,500 DARK STONES, RESCUED FROM THE RUBBLE, WERE USED IN THE RECONSTRUCTION. THE NEW CHURCH, SAYS HISTORIAN FREDERICK TAYLOR, "RESTORES THE SPIRIT OF THE CITY."

MATTHIAS RIETSCHEL / AP PHOTO

A former SMITHSONIAN *general editor, author* ANDREW CURRY *is currently a Fulbright Journalism Fellow in Berlin, Germany.*

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Ben Franklin Slept Here

The ingenious founding father's only surviving residence, in London, is reborn as a museum

BY SIMON WORRALL · PHOTOGRAPHS BY ROBERT WALLIS

JEFFERSON HAS his Monticello; Washington, Mount Vernon. Now, thanks to years of dogged fundraising on both sides of the Atlantic, Benjamin Franklin's only surviving residence, Number 36 Craven Street, London, opened its doors to the public on January 17, the 300th birthday of that most amiable and eccentric founding father.

Franklin is better known for his nine-year sojourn in France. But he lived far longer on Craven Street, just off Trafalgar Square. His London years bridged the most turbulent and decisive period of Anglo-American relations. As deputy postmaster general for North America and commercial agent for several of the Colonies, Franklin was at the heart of many of the key discussions and negotiations that would determine the course of Amer-

TOURISTS CAN NOW VISIT NUMBER 36 CRAVEN STREET (BELOW), THE HOUSE WHERE FRANKLIN (LEFT IN A 1766 PORTRAIT BY SCOTTISH ARTIST DAVID MARTIN) LIVED FROM 1757 TO 1775. "WE HAVE FOUR ROOMS FURNISHED, AND EVERYTHING ABOUT US PRETTY GENTEEL," HE WROTE HIS WIFE IN 1758.

TOP: GRANGER COLLECTION, NEW YORK

ACTRESS MEG FARAGHER (ABOVE) AS POLLY STEVENSON HEWSON, THE DAUGHTER OF FRANKLIN'S LANDLADY, GUIDES VISITORS THROUGH A HIGH-TECH PRESENTATION DRAMATIZING FRANKLIN'S LONDON YEARS. THIS IS "THE MUSEUM AS THEATER," SAYS THE SITE'S DIRECTOR, MÁRCIA BALISCIANO.

ican history. Indeed, it could be said that the United States was born on Craven Street.

Franklin arrived in London on July 26, 1757. He was 51 years old, and except for two intervals, the Craven Street house—a five-story Georgian structure built circa 1730—would be his home for the next 16 years. Franklin longed for reminders of home—his wife, Deborah, sent him packages of cornmeal, cranberries and buckwheat flour from Philadelphia—but London afforded him other satisfactions. "Of all the enviable things England has," he wrote in March 1763, "I envy it most its people. Why should that pretty island, which compared to America is but like a stepping-stone in a brook, scarce enough of it above water to keep one's shoes dry; why, I say, should that little island enjoy in almost every neighborhood more sensible, virtuous, and elegant minds than we can collect in ranging a hundred leagues of our vast forests?"

As a member of Britain's Royal Society since 1756, in recognition for his groundbreaking research into electricity and lightning, Franklin had access to London's lively intellectual, artistic and scientific circles. Visitors to Craven Street included James Boswell, biographer of Dr. Samuel Johnson, and scientist and philosopher Joseph Priestley. In coffeehouses and pubs such as the Dog Tavern or the George and Vulture (the Ship and Shovel, there in Franklin's day, is still open), Franklin debated the topics of the day.

In a laboratory he installed at the back of his first-floor rooms, he refined the stove that bears his name; identified lead poisoning as the cause of printers' maladies; invented the Armonica, a musical instrument made up of glass bowls driven by a treadle; wrote pamphlets and articles; worked on his autobiography; and by experimenting with different metals, perfected his famous lightning rod. As a result, lightning rods were placed on many of London's most famous buildings, including St. Paul's Cathedral and St. James' Palace.

And then there were Franklin's "air baths." As a young man, he had been a long-distance swimmer at a time when swimming was something most people did only to escape drowning (one of his greatest developments, in my opinion, was the swim fin). He used dumbbells and could, by a slight stretch, be said to have invented the StairMaster by walking up and down the Craven Street house's stairs (still there, still uneven) for exercise. And early most mornings, before he set

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British writer SIMON WORRALL *is the author of* The Poet and the Murderer *(Dutton, 2002), a true-crime story about literary forgery. Photojournalist* ROBERT WALLIS *is based in London.*

to work, Franklin would sit, he wrote to a friend in France in 1768, "without any clothes whatever, half an hour or an hour, according to the season," at his open, first-floor window, letting the air circulate over his, by then, considerable bulk. What the neighbors thought is apparently not recorded.

Franklin was torn by the growing conflict between Britain and America. He was an Anglophile and an American patriot who believed in the idea of the British Empire and in the rights of the Colonists. "I have lived so great a part of my life in Britain," he wrote his Scottish friend Henry Home, Lord Kames in 1767. "And formed so many friendships in it, that I love it and sincerely wish it prosperity; and therefore wish to see that union [between Great Britain and the Colonies], on which alone I think it [the British Empire] can be secured and established."

That union was finally scuppered by what Franklin referred to as "the affair of the tea," a tax on the import that led outraged Colonists to toss chests of the stuff into Boston Harbor in December 1773. Just a few weeks later, in what must have been one of the most painful moments of his life, Franklin was vilified and humiliated in front of the British Privy Council for his involvement in the so-called Hutchinson Affair. In December 1772, Franklin had leaked confidential letters written by the Crown's Massachusetts governor, Thomas Hutchinson, exposing the official's deep antipathy toward the Massachusetts Assembly and fueling anger on both sides of the Atlantic in the run-up to the War of Independence. Shortly after, Franklin was ousted from his position as American postmaster. He made repeated attempts to facilitate a reconciliation between the Crown and the Colonies, but to no avail. In March 1775, he boarded a packet boat back to Philadelphia. He spent his last day in Craven Street with his old chum Joseph Priestley, reading extracts from the American newspapers as tears rolled down his cheeks.

FRANKLIN, A GREAT MUSIC LOVER, CREATED THE ARMONICA, A SERIES OF GLASS BOWLS DRIVEN BY A TREADLE, AT CRAVEN STREET. THE INSTRUMENT (PLAYED BELOW BY MUSEUM EDUCATION OFFICER ANA DORIA BUCHAN) IS BELIEVED TO BE THE FOUNDING FATHER'S FAVORITE INVENTION.

THOUGH I KNOW London well, I had a hard time finding Craven Street, which is tucked away behind Trafalgar Square and Charing Cross Station in a warren of small streets that drop away to the Thames. Today, there is little street life, but in Franklin's time, the area was full of pubs and restaurants. For much of the past century, the house was owned by British Rail, the national railroad, and served as a hotel and as office space for various nonprofit organizations, including a bird-watching society. British writer C. P. Snow is said to have used the basement as an office in the 1970s. By the 1980s, however, the house was derelict.

The idea to restore the building was first broached by Mary Ponsonby, the American wife of the Earl of Bessborough, who established a trust for that purpose in the late 1980s. But it took almost 20 years more to raise the $5.5 million needed for the renovation. Indeed, without a grant of $2.7 million from the government-run British Heritage Lottery Fund, Franklin's only remaining residence would probably still be home to rats and squatters.

Instead, for an admission of £8 (about $14), visitors are now treated not to a re-creation of the interior of the house as it was when Franklin lived there but to a high-tech, theatrical experience dramatizing aspects of Franklin's London years. Starting in the kitchen, an actress playing the part of Polly Stevenson Hewson (the daughter of Franklin's landlady, Margaret Stevenson) leads visitors through the house. (Polly followed Franklin to America after the War of Independence and was at his bedside when he died.) The rooms are essentially bare—just exposed floorboards and walls painted a muted green, as they would have been in Franklin's day. Each room is dedicated to a different aspect of the many-faceted man. The first-floor rooms, for instance, where he slept, entertained, conducted scientific experiments and held crucial political meetings with members of the British government, are devoted to Franklin, the public man. Recorded extracts from Franklin's letters and other writings, reenacted speeches by members of Parliament and images beamed from ceiling-mounted projectors present visitors with a dramatization of the Hutchinson Affair.

"It's not like Colonial Williamsburg, where there's someone churning butter and you engage in conversation," says the site's director, Márcia Balisciano. "This is 'the museum as theater,' in which the visitor is very much a part of the drama."

Destination EUROPE 2006 HIGHLIGHTS

THE EUROPEAN FINE ART FAIR
The Netherlands—March 10-19

Maastricht, the oldest city in the Netherlands, turns into a vast museum—except just about everything is for sale. This year, 218 dealers from 14 countries will showcase 25,000 objets d'art, from an illuminated medieval Bible to Art Deco jewelry to a Roy Lichtenstein painting. If you can afford the price tag, you can even take home a Matisse. www.tefaf.com

THE CHELSEA FLOWER SHOW
London—May 23-27

It's one of the world's largest gardening competitions. England's Hillier Nurseries holds the record for 60 consecutive gold medals, but one of 600 challengers—from as far away as Hong Kong and Zimbabwe—might take the pruning shears to 2005's winner, Hillier's "Glowing Ambers" rhododendron. www.rhs.org.uk/chelsea

JEWISH CULTURE FESTIVAL
Krakow, Poland—July 1-9

In the old Jewish quarter, tragically emptied in World War II, hora lessons, Hebrew calligraphy and the Klezmer Brass All-Stars underscore the community's revival. www.jewishfestival.pl

EUROPEAN UNION CAPITAL OF CULTURE
Patras, Greece—Throughout 2006

The Peloponnesian port, known in Hellenic times for its cults of Dionysus, god of wine, offers a slightly more sober menu of Sophoclean tragedy, folk concerts, cabaret and commedia dell'arte. www.patras2006.gr/en

THE YEAR OF REMBRANDT
Amsterdam—Throughout 2006

If you need an excuse to ogle Rembrandt, here goes: this year marks the 400th anniversary of the original old master's birth, and the Van Gogh Museum and the Rijksmuseum are mounting blockbuster shows. The Rembrandt House Museum—the artist's home for 19 years—will host exhibitions about his work and 63-year-long life. www.rembrandt400.com

FRINGE FESTIVAL
Edinburgh, Scotland—August 6-28

Events occur round-the-clock at the world's largest open arts festival, with 10,000 performers. Expect Brecht, Bach, nude comedy and even a rap version of *The Canterbury Tales.* www.edfringe.com

CLOCKWISE: BRAM SABYS / HOLLANDSE HOOGTE / TEFAF MAASTRICHT 2006; TIMOTHY ALLEN / AXIOM / AURORA; KEVIN FOY / ALAMY; ANNA WATSON / AXIOM; JEFF J. MITCHELL / REUTERS; REUNION DES MUSEES NATIONAUX / ART RESOURCE, N.Y.

& HOT SPOTS

LA TOMATINA
Buñol, Spain—August 30

The streets of the medieval town near Valencia will run red as thousands of gastronomic warriors go ballistic with surplus tomatoes. A mecca for the messy since 1945. www.spain-info.com

FESTIVAL OF TWO WORLDS
Spoleto, Italy—June 30-July 16

The Umbrian town turns into a giant stage for its annual commingling of the classical and contemporary. Last year's program included Handel's opera *Ferdinand, King of Castile*, Tchaikovsky's *Swan Lake*—and the American movie *Kindergarten Cop*, starring "the Governator" in a less taxing role. This year promises to be no less eclectic. www.spoletofestival.it

THE YEAR OF MOZART
Prague, Salzburg and Vienna—Throughout 2006

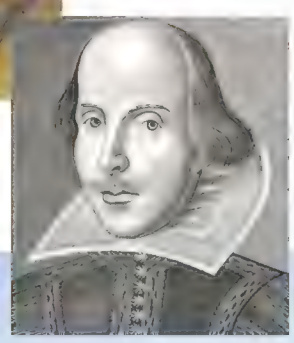
Too many notes? Three cities with important ties to the prototypical music star will undoubtedly prove otherwise as they celebrate his 250th birthday. There'll be 15 operas, 56 symphonies, all-star musicians and enough Mozartkugeln—Salzburg's signature sweet—to satisfy Wolfgang's legions of fans. www2.salzburg.info; www.wienmozart2006.at; www.mozartprague2006.com

THE WORLD CUP
Germany—June 9-July 9

World domination? At least bragging rights for the next four years. The quadrennial tournament, the most important in football, will be held in 12 German cities hosting 32 international teams in 64 matches. Just don't call it soccer. www.fifaworldcup.com

THE YEAR OF CÉZANNE
France—Throughout 2006

The Musée D'Orsay in Paris and the Musée Granet in Aix-en-Provence mark the 100 years since Paul Cézanne's death, at 67, with major shows. In Aix, visit his studio, Les Lauves. www.cezanne-2006.com



SHAKESPEARE'S COMPLETE WORKS
Stratford-upon-Avon—
April 2006-April 2007

Judi Dench and Patrick Stewart are among the players scheduled to strut and fret their hours upon three stages in the dramatist's hometown in what the Royal Shakespeare Company says is the first ever complete cycle of all 37 of his plays. www.rsc.org.uk —*AMY CRAWFORD*

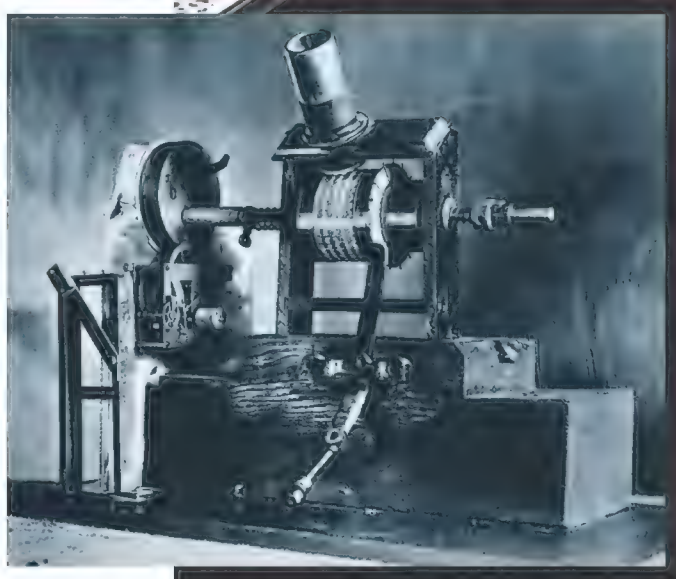
DESMOND BOYLAN / REUTERS / CORBIS; CHRISTOPHE SIMON / AFP / GETTY IMAGES; PAUL CEZANNE, "STILL LIFE" (DETAIL), C. 1900. NATIONAL GALLERY OF ART, GIFT OF THE W. AVERELL HARRIMAN FOUNDATION IN MEMORY OF MARIE N. HARRIMAN; BRITISH MUSEUM, LONDON / ART RESOURCE; ROBERT HAIDINGER / ANZENBERGER AGENCY; AP / WIDE WORLD PHOTOS

DANCING IN THE DARK

JUST AS THOMAS EDISON GAVE "GENIUS" NEW DIMENSION, HIS EFFORTS AS A FILMMAKER DEFINED ITS LIMITS **BY TIM PAGE**

CERTAIN CREATORS astound us with their sheer fecundity. Anyone who has ever tried to write fiction can only marvel at the 400-plus books that the late Georges Simenon ("Inspector Maigret") turned out. Franz Joseph Haydn found time to compose some 106 symphonies, dozens of string quartets, more than 50 piano sonatas and a vast amount of other music. And then there is Thomas Edison, with his roster of 1,093 patents, held singly or jointly. Even allowing for overlap—424 of those patents were for electric light and power, 199 were for the phonograph and 186 were for the telegraph—it is an astonishing achievement.

Communication was a central theme for Edison (armchair Freudians have attributed this to his poor hearing, which afflicted him from an early age). He began his career in telegraphy, developing a technology in the early 1870s that permitted several messages to be sent over the same wire at once. In 1877, he invented the phonograph cylinder, and this "talking machine" quickly made him famous. And in the late 1880s, he turned his attention to the motion picture, which, he said, might do for the eye what the phonograph had done for the ear—specifically, "the recording and reproduction of things in motion, in such a form as to be . . . cheap, practical and convenient."



"CHEAP, PRACTICAL AND CONVENIENT" WAS THE GOAL THAT EDISON (IN HIS NEW JERSEY LAB, C. 1915) SOUGHT AS THE INVENTOR BEGAN EXPERIMENTING WITH THE KINETOGRAPH (AN 1889 MODEL).

But nobody can do everything, and creative genius has many different guises. Edison produced one radical

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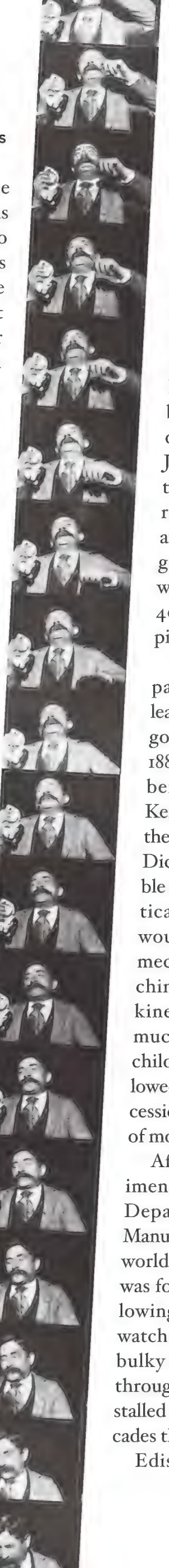

EARLY EDISON FILMS WERE PRIMITIVE, ROWDY AND TEEMING WITH LIFE. ONE MERCIFULLY SHORT SUBJECT FEATURED HIS ASSISTANT FRED OTT SNEEZING (RIGHT).

new idea after another over the course of half a century, but if his creativity was amazing, it was also limited. He could make enormous leaps of imagination when it came to technical developments, but when it came to exploring their artistic potential, he was largely a failure. Basically, he did not have an aesthetic bone in his body. In this Academy Awards season, it's worth noting that while he brought the "entertainment business" to life with his development of recorded sound and motion pictures, Edison's own records and films have been all but forgotten.

Until recently. Kino International last year brought out a four-DVD set titled *Edison: The Invention of the Movies* containing 140 films made between 1891 and 1918 by the Edison Company. They range from primitive experiments lasting only a few seconds to a silent feature, *The Unbeliever*, an anti-German screed featuring Erich von Stroheim. It was released to support America's entry into World War I. The DVD set, co-curated by Charles Musser and Steven Higgins, also contains more than two hours of interviews with, among others, Eileen Bowser, curator emerita of the film division of the Museum of Modern Art, in New York, and Paul Israel, director and editor of the Edison Papers at Rutgers University, as well as detailed film notes and photographic replications of more than 200 documents. It is a brilliant and engrossing collection, essential for the scholar, of course, and fascinating for anybody who loves movies.

Edison cannot be said to have "invented" movies in the same way he did the phonograph. What seems to have triggered his interest in film was the work of Eadweard Muybridge, a photographer who had won renown for his series of rapid-fire sequential images of bodies in motion. In February 1888, Muybridge visited Edison's studio in West Orange, New Jersey, and proposed that the two of them collaborate on combining sound and vision, effectively suggesting a prototype for what would become, some 40 years later, the talking picture.

Edison, who was never a particularly generous colleague, ultimately decided to go it alone. By the fall of 1888, he had assigned a member of his staff, William Kennedy Laurie Dickson, to the project, with the idea that Dickson would be responsible for photographic and optical research while Edison would create an electromechanical design. The machine that resulted, called a kinetoscope, was based on much the same theory as a child's "flip book": image followed image in such rapid succession that it gave the illusion of motion.

After several years of experimentation, the Kinetograph Department of the Edison Manufacturing Company—the world's first movie company—was formed in 1894. By the following year, a spectator could watch short bursts of film on a bulky kinetoscope by gazing through a peephole. Edison installed the machines in penny arcades throughout the country.

Edison could be curiously

JOHN SPRINGER COLLECTION / CORBIS; P. 102 GRANGER COLLECTION, NEW YORK; INSET: CORBIS

"Edison was much more interested in hardware than software," one scholar says. Making films was a way to feed his inventions.

stubborn about his inventions, more interested in their mechanical forms than in any content they might convey. He seemed to see no future in projected films: indeed, he worried that allowing more than one person at a time to watch his "moving pictures" would drain profits. It was left to the Lumière brothers, in France, to develop a commercial projector and show a film to a paying audience. The brothers' immediate success prompted a reluctant Edison to buy manufacturing rights to a competing machine developed in the United States by Thomas Armat and C. Francis Jenkins, which Edison marketed as the Vitascope in 1896.

"Edison felt most comfortable as a manufacturer selling to businesspeople," Paul Israel observes in his exhaustive biography *Edison: A Life of Invention.* "He knew how to respond to complaints about technical problems. He was less certain about the aesthetic issues associated with the consumer market. The early projection systems were not necessarily technologically superior to the peephole kinetoscope, but they produced a more satisfactory aesthetic product."

Richard Koszarski, a professor of film at Rutgers University, agrees. "Edison was much more interested in hardware than software," he says. "For example, when he was working with electricity, Edison was most inspired by creating all these varied and elaborate power grids. And what did he feed them? Light bulbs—millions of them, disposable and all but identical, and that was just fine with him. But every film, every recording has to be a little bit different—there's a whole new aesthetic dimension—and people won't buy a phonograph or a projector without something to play on it. So that's why Edison went into making records and films—it was a necessity to feed and sustain his inventions."

Edison never directed a film; rather, he forged an environment and provided financial support so that films, which he would distribute, might be made by others. His first movie studio, known as the Black Maria after the contemporary slang for a police wagon, was a large box, with a hinged roof and black paint inside and out, that could be turned in any direction to follow the sun. There, a group of talented, inquisitive and surprisingly playful men gathered to pioneer what would become the 20th century's most significant art form.

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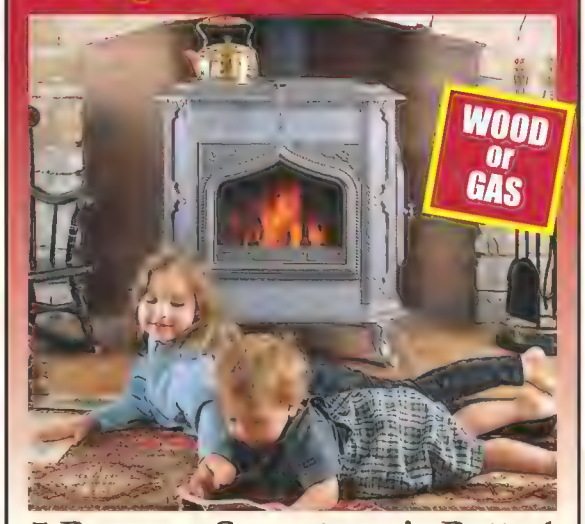

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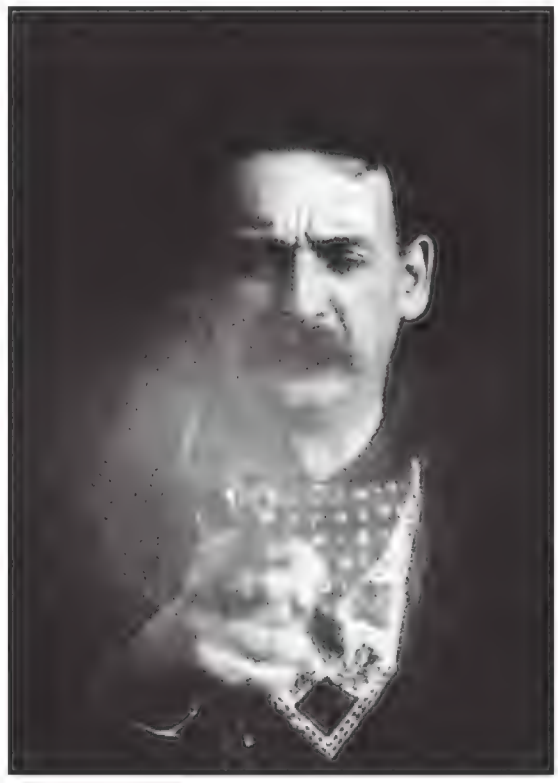
People screamed and ducked and then laughed, with the same happy terror they find on roller coasters.



EDISON / KOBAL COLLECTION

FILMGOERS HAD NEVER SEEN ANYTHING LIKE IT: EDWIN S. PORTER'S *THE GREAT TRAIN ROBBERY* WAS A HIT FOR EDISON'S STUDIO (JUSTUS BARNES IN THE CLOSING SCENE, ABOVE).

Edison's early films are primitive, rowdy and teeming with life. They include images of acrobats and weight lifters, cockfights and boxing matches, firemen racing furiously toward hotel fires, the night lights of Coney Island and any number of streetscapes from a vanished Manhattan. A man sneezes—the most banal, everyday thing in the world, captured forever. Annie Oakley shoots at glass balls tossed into the air, while the trapeze artist and pioneering "strongwoman" Charmion removes her clothes while suspending herself high above the ground. An exotic dancer named Fatima, who had been a sensation at the 1893 World's Columbian Exposition, wriggles seductively in a "muscle dance" that was considered so risqué that it was censored (somebody superimposed what looks like a white picket fence over her gyrations). An actress

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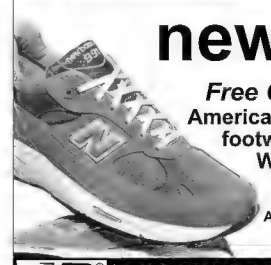

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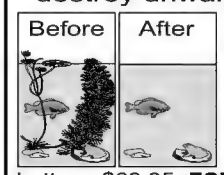

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playing Mary, Queen of Scots appears to lose her head. There is newsreel footage from the Spanish-American War and from the Galveston flood. In a scene that is difficult to watch even today, an elephant is taken into a pit and summarily electrocuted, roaring silently and collapsing onto its side amid a puff of smoke.

All of these are interesting, but none of them is art: creatively speaking, the movies were still a toy. Then, in late 1903, came *The Great Train Robbery*, the American cinema's first defining masterpiece. Directed by Edwin S. Porter, this 12-minute epic is an archetype for the western (despite its central New Jersey locations). The story could not be simpler—bad guys hold up a train, escape and frolic for a while with their ill-gotten gains, and are finally caught and killed—but a new bond was forged between filmmaker and viewer; stationary vignette gave way to active storytelling. At the end, one of the actors, Justus Barnes, points his pistol at the audience and fires it in our faces. The effect on 1903 filmgoers, who had never seen anything like it, was phenomenal; people were widely reported to have screamed and ducked and then laughed when it was over, with the same happy terror that aficionados find on roller coasters. *The Great Train Robbery* was a gigantic hit: as storefronts were converted into theaters all over the country, they showed the film, which was then followed by a string of copycats with titles like *The Bold Bank Robbery.*

Porter continued to work for Edison until 1909, directing films such as *European Rest Cure*, *The Kleptomaniac* and the delightfully titled *How a French Nobleman Got a Wife Through the New York Herald Personal Columns.* He even parodied his most famous work in *The Little Train Robbery*, substituting children for adults and using a miniature railroad and playhouse for his sets.

But as the decade wore on, Edison films were increasingly criticized for their technical crudity and inferior photography. Koszarski has a simple explanation: "Edison wasn't interested in art; he wanted to deliver product.

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The world had changed: a young genius named David Wark Griffith, who had made his screen acting debut in Porter's *Rescued from an Eagle's Nest* in 1908, moved over to direct for Biograph, Edison's great rival. There, Griffith would evolve new film techniques and—perhaps even more important—explore a language of the heart that would change motion pictures forever, as the flickering characters on the screen increasingly took on human dimensions.

The embattled Edison settled in to guard his patents and to litigate against anybody who tried to infringe on what he considered his permanent territory. After losing a number of court battles, he began to withdraw from what was becoming the "movie industry" and grew more and more interested in developing a small motion picture machine that could be used in homes, schools and churches (the precursor of

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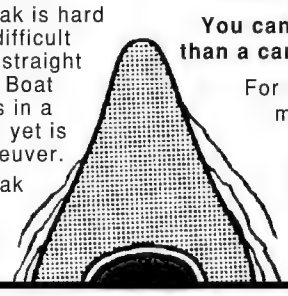

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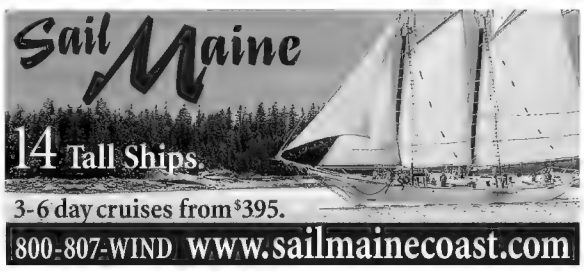

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today's VHS and DVD machines). To this end, he made a number of educational films—one of the most accomplished, a study of magnetism, was released commercially—but they were spectacularly unprofitable at the time, and he dropped the projects.

By 1915, the Edison Company was headed toward a precipitous decline. It had been slow to move from short subjects to full-length feature films, which increasingly dominated the market, and it was further affected by the outbreak of the Great War and a substantial diminishment of European profits. The company limped on until 1918, releasing *The Unbeliever* just as it was preparing to go out of business and sell off all of its equipment, at fire sale prices. *The Unbeliever* is propaganda, to be sure, but rather engaging propaganda for all that, and it holds up well when compared with other works of its time that explored similar turf, even Griffith's *Hearts of the World*. The battle scenes, in particular, which were shot at the Marine base in Quantico, Virginia, were much admired.

It would be unfair to call Edison's venture into filmmaking a failure. He played a huge role in the creation of a technology that permitted the great new art form of the 20th century to flourish, and the films he released allow us palpable visual contact with a vanished world. And if Edison's particular strain of creative genius placed emphasis on technical gadgetry over artistic statement, he nevertheless managed to assemble a company that was filled with talented artists—right to the very end. In a curiously appropriate irony, the director of Edison's last film, *The Unbeliever*, was a young man named Alan Crosland, who would go on to direct *The Jazz Singer* (1927), the first "all-talking" picture and the fulfillment of the long-ago conversation between Thomas Edison and Eadweard Muybridge that got the movies going.

TIM PAGE is the classical music critic for the Washington Post *and has written a biography of the novelist Dawn Powell.*

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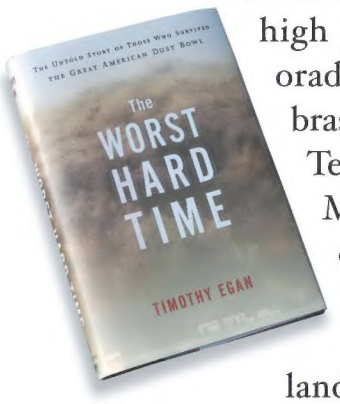
REVIEWED BY KATHLEEN BURKE

EVEN TODAY, writes Timothy Egan, the daunting expanse of this nation's southern plains "scares people in the way that a big house can haunt after the lights go out." It is a landscape that intimidates, he says, largely as a consequence of "forced intimacy with a place that gives nothing back to a stranger." In his magisterial history of the region that came to be known as the Dust Bowl—the area encompassing the high plains of Colorado, Kansas, Nebraska, Oklahoma, Texas and New Mexico—Egan evokes a portrait of an all but forgotten land. It was there, in the darkest hours of the Great Depression, that a decade-long series of dust storms ravaged the land and the settlers who tried to claim it.



Homesteaders thronged to the high plains—once one of the world's great grasslands—during the 1920s, lured by cheap land and rising wheat prices. As farmers plowed the prairie in their tractors—then coming into general use—they stripped the soil of the sod that had anchored it for millennia.

In the early 1930s, the dust blizzards began. Ultimately, the storms laid bare more than 100 million acres, an area the size of Pennsylvania. By 1935, some 250,000 Americans had been forced from their no longer cultivatable farms.

In 2002, Egan set out on an extraordinary odyssey, determined to record the experiences of Dust Bowl survivors before their eyewitness accounts were lost to history. His intention was to

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document a largely untold chapter in American history: the stories of those who—unable or unwilling to abandon their hard-won farms and towns—had not fled. As Egan, a Pulitzer Prize-winning *New York Times* reporter, would discover, "nearly two-thirds of the Dust Bowl inhabitants hunkered down and lived through the Dirty Thirties," at a time when there was "no food from the land, no jobs during the Depression, no money from the government until much later." Egan traveled highways and back roads to towns and ranches, family farms and local historical societies, determined to preserve a "remarkable tale that should be part of our shared national story."

As people opened their doors and their lives to him, Egan resurrected a sorrowful, yet heroic, past. Ike Osteen, for instance, today a 90-year-old retired farmer, lived through the bad years in an earth-and-plank dugout with his widowed mother and eight siblings, nearly starving, choking as dust sifted into their lungs. When Osteen completed high school, the only child in his family to do so, he turned the diploma over to his mother. "Mama: I still don't think I'm as smart as you," he told the woman who was holding the family together. "Not one bit."

Egan also pays tribute to Hugh Hammond Bennett, a lone visionary whose signal achievement remains largely unacknowledged. Appointed by President Roosevelt, agronomist Bennett headed up what came to be known as Operation Dust Bowl. It was this outsider's passionate belief that grasslands must be restored on the plains and that destructive farming practices must be ended altogether. He conceived a plan that would reintroduce prairie grasses on more than 600,000 acres. His legacy, Egan writes, is an enduring one: Bennett's "soil conservation districts spread throughout America" constitute "the only New Deal grassroots operation that survives to this day."

Reviewer KATHLEEN BURKE is a senior editor at SMITHSONIAN magazine.

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GLOBAL WORDING

IF YOU CAN'T SAY IT IN ENGLISH, JUST BORROW LE MOT JUSTE **BY ADAM JACOT DE BOINOD**

ONE DAY WHILE I WAS WORKING as a researcher for the BBC quiz program "QI," I picked up a weighty Albanian dictionary and discovered that the Albanians have no fewer than 27 words for eyebrows and the same number for mustache, ranging from *mustaqe madh*, or brushy, to *mustaqe posht*, or drooping at both ends. Soon I was unable to go near a secondhand bookshop or library without seeking out the shelves where the foreign-language dictionaries were kept. I would scour books in friends' houses with a similar need to pan for gold.

My curiosity became a passion, even an obsession. In time I combed through more than two million words in hundreds of dictionaries. I trawled the Internet, phoned embassies and tracked down foreign-language speakers who could confirm my findings. Who knew, for example, that Persian has a word for "a camel that won't give milk until her nostrils have been tickled" (*nakhur*)? Or that the Inuits have a verb for "to exchange wives for a few days only" (*areodjarekput*)? Why does Pascuense, spoken on Easter Island, offer *tingo*, which means "to borrow things from a friend's house, one by one, until there's nothing left"?

The English language has a long-established and voracious tendency to naturalize foreign words: ad hoc, feng shui, croissant, kindergarten. We've been borrowing them from other cultures for centuries. But there are so many we've missed.

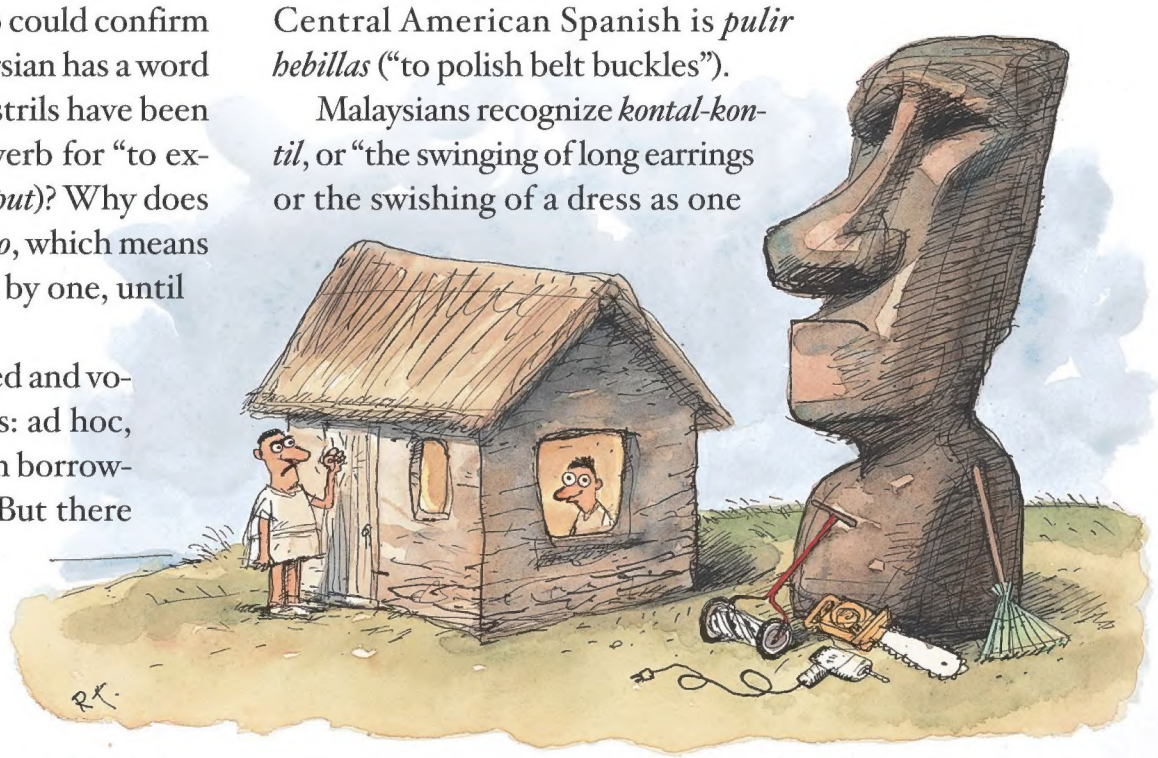
Our body-conscious culture might have some use for the Hawaiian *awawa*, for the gap between each finger or toe; the Afrikaans *waal*, for the area behind the knee, or the Ulwa (Nicaragua) *alang*, for the fold of skin under the chin. Surely we could use the Tulu (India) *karelu*, for the mark left on the skin by wearing anything tight. And how could we have passed up the German *Kummerspeck*, for the excess weight one gains from emotion-related overeating? (It translates literally as "grief bacon.")

Gras bilong fes, from the Papua New Guinea Tok Pisin, is more poetic than "beard"; it means "grass belonging to the face." And how about the German *Backpfeifengesicht*, or "face that cries out for a fist in it"?

In Wagiman (Australia), there's an infinitive—*murrma*—for "to walk along in the water searching for something with your feet." The Dutch have *uitwaaien*, for "to walk in windy weather for fun," but then Central American Spanish speakers may win a prize for articulating forms of motion with *achaplinarse*—"to hesitate and then run away in the manner of Charlie Chaplin."

In Russian, they don't speak of crying over spilled milk; they say *kusat sebe lokti*, which means "to bite one's elbows." That may be better than breaking your heart in Japanese, because *harawata o tatsu* translates literally as "to sever one's intestines." To be hopelessly in love in Colombian Spanish is to be "swallowed like a postman's sock" (*tragado como media de cartero*). That happy state may lead to dancing closely, which in Central American Spanish is *pulir hebillas* ("to polish belt buckles").

Malaysians recognize *kontal-kontil*, or "the swinging of long earrings or the swishing of a dress as one walks." Fuegian, in Chile, has a word for "that shared look of longing where both parties know the score yet neither is willing to make the first move" (*mamihlapinatapei*). But Italian has *biodegradabile*, for one "who falls in love easily and often."



RICHARD THOMPSON

Persian has *mahj*, for "looking beautiful after a disease"—which, deftly used, might well flatter (*vaseliner* in French, for "to apply Vaseline") some recovered patients. But you'd have to lay it on pretty thick for a *nedovtipa*, who in Czech is "someone who finds it difficult to take a hint."

On Easter Island, it may take two to *tingo*, but it takes only one to *hakamaru*, which means "to keep borrowed objects until the owner has to ask for them back." Of course, words once borrowed are seldom returned. But nobody is going *harawata o tatsu* over that.

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